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TECHNICAL REPORT

75-11-FEL

RELATIONSHIPS BETWEEN CHEMICAL STRUCTURE AND RAT REPELLENCY.

II. COMPOUNDS SCREENED BETWEEN 1950 AND 1960.

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Project Order Nos. 61-52 thru 72-112

August 1974

UNITED STATES ARMY
NATICK LABORATORIES
Natick, Massachusetts 01760

U.S. ARMY TROOP SUPPORT COMMAND

Food Engineering Laboratory

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RELATIONSHIPS BETWEEN CHEMICAL STRUCTURE AND RAT REPELLENCY. II. COMPOUNDS SCREENED BETWEEN 1950 AND 1960.

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ABSTRACT

Over 4,600 compounds, chiefly organic types, were evaluated using both a food acceptance test (Part A) and a barrier penetration bioassay (Part B), to correlate relationships between chemical structure and rodent repellency.

These chemicals are indexed and classified according to the functional groups present and to the degree of substitution within their molecular structures. The results of reduction in food consumption for each compound appraised are calculated and their K values listed in Table I.

The repellent activities of the functional groups represented, alone or in combinations, are expressed in Table II by a Functional Group Repellency Index. A ranking of these indices suggests that acyclic and heteroyclic compounds containing tri- or pentavalent nitrogen would be a parent compound of choice for synthesizing novel repellents. Other molecular arrangements, spatial configurations and combinations of functional groups are compared.

There were 123 active, interesting or promising compounds included in the 699 having K values of 85 or greater, which were selected for the barrier appraisal study. These chemicals were formulated in selective solvents at several concentrations and applied to burlap. Small food bags were fashioned using the fabric impregnated with the candidate formulation, and exposed to rodent attack following storage periods of varying intervals. The results of these tests are listed in Table III. Again, those compounds containing nitrogen in the functional groupings indicated a high order of effectiveness. Several commercial patents covering rodent repellents were issued using the data from the food acceptance and barrier studies.

Organizations and cooperators which supplied samples for the program are listed in Appendix I. The Wiswesser cipher for compounds in Table I is used in Appendix II to facilitate location of chemicals by sample code number as they appear under the index headings, and for computer storage and analysis.

RELATIONSHIPS BETWEEN CHEMICAL STRUCTURE AND RAT REPELLENCY: II. COMPOUNDS SCREENED BETWEEN 1950-1960

INTRODUCTION

Rodents, principally rats and mice, cause extensive damage to stored products and other food and non-food materials by their chewing behavior. Although behavioral and physiological research now in progress will undoubtedly suggest new methods to prevent such chewing, practically all research to date has been directed toward finding chemicals sufficiently aversive to rodents to repel them. Since 1946, the U. S. Army's Natick Laboratories have supported a program of evaluating chemicals as rodent repellents for protecting food packaging, electric cable coatings, and other materials.

Under this program, more than 7,000 compounds, mostly organic, have been screened for repellent activity. However, only a small fraction of these, less than 10 percent, were sufficiently active to consider for barrier tests--"second-level" evaluation on small burlap food sacks. Still fewer (less than 2 percent) were feasible to formulate onto specific materials, such as the burlap used in these tests.

Bellack et al. (1) listed the compounds tested under this program through 1949 and discussed relationships between their chemical structure and their activity as repellents. This report covers some 4,600 compounds tested between 1950 and 1960. Part A continues the listing of compounds and the discussion of their structure and activity. Part B gives results of barrier tests with the compounds found active in Part A. Appendix I lists the Federal laboratories and private companies that supplied the compounds tested. Most were either submitted or solicited for testing because they showed preliminary indications of biological activity; 261 were synthesized as possible repellents by the Patuxent Wildlife Research Center. Finally, Appendix II serves as an index, listing each compound by its code number, the page or pages on which it appears in Table I, and the Wiswesser line notation (WLN) describing its chemical structure in a unique one-dimensional cipher suitable for indexing and computer processing.

PART A - FOOD ACCEPTANCE TESTS

EXPERIMENTAL METHODS

The compounds were tested at the Patuxent Wildlife Research Center by the food acceptance method summarized by Bellack et al. (1) and described in detail by Bellack and DeWitt (2). Since the former publication has been out of print for several years, the food acceptance test method is again summarized here for convenience:

For each compound, three individually caged laboratory rats were given two food cups, one containing 20 g of a standard laboratory diet, and the other containing 20 g of the same food to which 400 mg of the test material had been added. Water was supplied ad libitum, and the food consumption was determined daily during the test period of 4 days. On the fifth day, all test animals were killed. At the close of the experiment, the degree of repellency of the test material, expressed as the index number K, was calculated by the formula:

$$K = 100 - \frac{1}{100W}\left(8T_1 + 4T_2 + 2T_3 + T_4\right)\left(U_1 + U_2 + 2U_3 + 4U_4 + 8X\right)$$

where:

W = the body weight of the animal (in kilograms),

$T_1 \ldots T_4$ = the consumption (in grams) of the treated food on the first through the fourth day of the test,

$U_1 \ldots U_4$ = the consumption (in grams) of the untreated food, and

X = the amount (in grams) of untreated food remaining at the conclusion of the experiment.

RESULTS AND DISCUSSION

Table I

Table I lists the sample code number, the chemical name, and the K value for more than 4,600 compounds appraised as rat repellents by the food acceptance test. Identified compounds are named according to the system used by Chemical Abstracts (3). Manufacturers' specialty products of questionable structure or unknown composition are listed according to the trivial, trade, or catalog name assigned by the supplier. Where different suppliers have assigned ambiguous or diverse chemical names to the same compound, a single name consistent with standard nomenclature rules has been derived for listing in the table. Compounds have not been renamed for cross-referencing. For example, the cyclic anhydrides of maleic and phthalic acids are listed under "ACID ANHYDRIDES" as maleic and phthalic anhydrides. These names are retained for placing them under "HETEROCYCLIC COMPOUNDS, Oxygen" and not renamed as the ring structures 2,5-furandione and 1,3-isobenzofurandione.

In addition to 60 conventional indexing headings corresponding to the functional groups in the molecule, Table I includes more than 15 headings representing special-interest compounds, such as carbamates, nicotine and derivatives, thiurams, etc. These have been added to accommodate the large numbers of compounds produced when the screening

laboratory was actively appraising candidate repellent compounds and the manufacturers were seeking multiple uses for compounds they had developed as pesticides. Thus, the pyrrolidiniums, ring structures containing a pentavalent nitrogen atom, are listed under "HETEROCYCLIC COMPOUNDS, Nitrogen" and "QUATERNARY NITROGEN COMPOUNDS, Heterocyclic Compounds", and are also included under "NICOTINE DERIVATIVES".

In Table I, a K value of 85 or greater is underscored, indicating that the compound was considered promising and was further evaluated by the same test but at concentrations of 1 percent or 0.5 percent. When the K value continued at 85 or greater in these concentration-effect bioassays, the compound was considered a candidate for the barrier test; all compounds tested by the barrier test are marked with an asterisk following the sample code number and are reported in Part B. A "T" in the "K Value" column indicates that the compound was toxic, i.e., that one or more of the test animals died during the test.

Several cautions should be observed in interpreting the data from this type of bioassay. First, because it was intended only for initial screening of large numbers of compounds, the number of test animals was small, the test period was short, only one bait concentration was used for the initial bioassay, and no attempt was made to allow for such confounding factors as position effects. Thus, the K values in Table I can be considered as within the normal range of rat behavior toward given compounds, but not as representing the mean of such behavior. Second, unless rats died during the 4-day test period, there was no way to determine if a test compound was toxic. Because bait avoidance is a common result of sublethal intoxication, some high K values probably represent, not "true" repellents, but poorly accepted toxicants. Finally, it should be remembered that the compounds tested represent only a small fraction of the functional group combinations or configurations possible in organic compounds. Although a comparison of repellency among groups can provide useful guidelines for further work, it is valid only within the limits of the compounds and the concentrations tested.

Table II

Table II presents an "activity index", called a Functional Group Repellency Index, derived from the K values of the compounds listed under the various functional group headings in Table I. With this listing, not discrete compounds, but functions (an atom, a group of atoms, or a unique spatial configuration) can be examined for their influence on food consumption.

The Functional Group Repellency Index was calculated from the following formula:

$$\text{Repellency Index} = \frac{AB}{CD}$$

where:

A = the number of chemicals in a group with K values greater than 84,
B = the mean K value for the group,
C = the coefficient of variation of the K values, and
D = the constant 12 (the mean number of chemicals with K values greater than 84 in groups in which more than 10 chemicals were tested).

D is included as a weighting factor, so that a group in which, say, four out of five chemicals tested had K values greater than 84 does not get more weight than groups in which 16 out of 20 chemicals tested had K values greater than 84.

Entries in the columns headed "Functional Group" and "Substituent" follow the same classification scheme and permutations of group titles used in Table I. The number of compounds tested in each functional group and their mean K value are listed in the columns headed "No. Tested" and "$\bar{K}$". The "CV" column lists the coefficient of variation of the K values (CV = standard deviation ÷ $\bar{K}$, represented as a percentage). The CV is included as a means of comparing the amount of variation in K values within groups. (K values in Table I ranged from -279 to 100, but the range was small within some groups, large within others.) The calculated Functional Group Repellency Index is entered under the "Repellency Index" column. A value of 99.99 in this column is a dummy value generated by the computer when the CV was zero; it is not an indication of high activity.

There are 621 groups listed in the "Functional Group" column; 206 of these are combinations produced by the permutation of all index and special-interest functions, and 415 are specific functional headings (unsubstituted, mixed, mono-, di-, or poly-substituted). Of the 621, 122 have a Repellency Index value of zero, and 182 have values between 0.01 and 1.00. The remaining 121, which have values ranging from 1.00 to 26.90, are considered as those groups or combinations of groups that are relatively active as rodent repellents.

The 10 headings with the largest Repellency Index values were as follows: Heterocyclic Compounds, Nitrogen, 26.90; Amide-Heterocyclic-Nitro Compounds, 24.00; Phenol-Thiocyanate Compounds, 21.78; Quaternary Nitrogen, Ammonium Compounds, 17.89; Primary Amine Compounds, 13.10; Thiourea Compounds, 12.26; Halide-Thiourea Compounds, 11.98; Alcohol-Halide-Quaternary Nitrogen Compounds, 11.90; Nicotine Derivatives, 11.40; Halide (Iodide) Compounds, 11.13.

This alignment suggests that the most active repellents are multi-membered cyclic compounds containing a nitrogen hetero atom, and points to other functional combinations that contribute to repellency. However, the ranking results from comparing a variety of molecular types--those containing only single functions, as well as those containing multiple or mixed functions. Possibly a more useful ranking could be realized if compounds of only one function were rated against each other. However, there are only 41 headings in Table II listing compounds of simple, unsubstituted functions; the rest of the compounds belong to the more than 2,000,000 that contain multiple or mixed functional groups. If the level of repellency depends on the kinds--not merely the numbers--of functional groups in the molecule, then the activity of the functions must be examined separately. Those functions that confer high repellency--and the positive or negative synergistic effect that each imparts to any combination of functions--must be identified before one can systematically identify or synthesize compounds likely to be good repellents.

Although Table II does not present examples of all possible functional group combinations, the Repellency Index value for those that do appear can be sorted and averaged to give a mean Functional Group Repellency Index. For example, halides appear 31 times, as fluorides, chlorides, bromides, and iodides, for a total Repellency Index value of 146 and a mean of 4.71. When all functions in Table II are sorted in this manner, the 10 with the highest Repellency Index values are the following: Quaternary Nitrogen Compounds, 11.16; Thioureas, 8.76; Guanidines, 6.71; Nicotine and derivatives, 6.59; Phenols, 5.67; Amides, 5.31; Thiocyanates and Isothiocyanates, 5.08; all Heterocyclic Compounds, 4.86; Halides, 4.71; and Alcohols, 4.06. (It should be noted that some index compounds--benzothiazolium, imidazolium, isoquinolinium, etc.--are found under two headings, "Quaternary Nitrogen Compounds" and "All Heterocyclic Compounds".)

This ranking based on the presence of single functions may provide some insight into the relationship between repellent acitvity and chemical structure. Among the 10 highest-ranking functions, 2 contain the monovalent hydroxy group, 3 contain divalent sulfur, and 7 contain trivalent and pentavalent nitrogen. This suggests that a good starting point in synthesizing new repellents would be parent compounds containing a quaternary nitrogen in the nucleus. Many of the commercially available surfactants of the quaternary nitrogen type, such as the benzalkoniums, benzethoniums, cetylpyridiniums, and methylbenzethoniums, are established fungistatic and bacteriostatic agents that are also known to reduce food consumption. The imide function and tributyltin fragments also exhibit both biostatic and rodent repellent action. More of these types of compounds should be investigated as rodent repellents.

The search for effective repellents should entail testing or synthesizing compounds containing these high-ranking functional groups.

In most cases, there was not enough information to suggest which configurations within these functions might provide the best repellents. For example, there were active thioureas of both the chain and cyclic types. However, monofunctional guanidine compounds with any or all of the hydrogens on the nitrogens replaced at the 1- and 3- positions with hydrocarbon radicals appeared to be better repellents than either the N-substituted derivatives or ring structures with nitrogen in the 1-, 3-, and/or 4- position. The presence of halides appeared to increase the repellency of other functional configurations; there may be some correlation between the increased solubility of most halogenated compounds and their ability to influence taste and smell. However, it is also possible that some of the halides with high K values were actually poorly accepted toxicants. Some bridged chlorinated hydrocarbons, as well as many organophosphates, are recognized as compounds of this type. Toxic compounds are not promising nuclei to consider in synthesizing repellents because there is usually a small margin of safety between repellent and toxic concentrations.

This discussion of the 10 highest-ranking functions does not mean to imply that other functions cannot provide good repellents. Two of the more effective compounds discovered in this study, trinitrobenzene-aniline complex and beta-nitrostyrene (BNS), are hydrocarbon radicals carrying nitro substituents. The primary, secondary, and tertiary amines, along with some of their salts or addition products, and the esters of carbamic acid and its sulfur analogs, were also effective repellents. In general, however, most of the functions not listed can be condisered to be relatively inactive as repellents. Although acid anhydrides, aldehydes, carboxylic acids, esters, ethers, ketones, and lactones are chemically reactive, none acted as rodent repellents at the concentration used.

Except for the alcohols and phenols, there were relatively few effective groups that did not contain some elements besides carbon, hydrogen, and oxygen. It is also apparent from the ranking that repellency does not depend on the identity of a molecule's hydrocarbon radical. In fact, many examples may be located in which activity is apparently enhanced or depressed by the same hydrocarbon radical. We have made no attempt to relate repellency to carbon chain lengths or isomers, aromatic or alicyclic configurations, extent of saturation or location of unsaturated bonds, or sites of substituents. This kind of analysis would undoubtedly suggest further guidelines for predicting activity. For example, there were indications that repellency increases as the carbon chain length increases from 4 carbons through 12 carbons, and that the addition of aryl radicals reduces the repellency of some groups.

Our conclusions from the data in this report that certain chemical functional groups tend to be associated with rodent repellency were substantiated by the barrier tests (Part B) and by other subsequent investigations at the Denver Wildlife Research Center.

PART B - BARRIER TESTS

Although the food acceptance test described in Part A was a simple and economical method of screening large numbers of compounds for repellent activity, a high K value when a compound was mixed with food did not necessarily indicate that the compound would be useful as a repellent for packaging materials. To evaluate this, a barrier test bioassay was developed at the Denver Wildlife Research Center (J. F. Besser and J. R. Tigner, personal communication).

Altogether 123 compounds were tested by the barrier test. Most were drawn from the 699 compounds that had K values of 85 or more at 2, 1, and 0.5 percent in the food acceptance test (Table I). A few had lower K values but were of special interest because of low cost, unique structure, or close relationship with other active compounds. The rest of the 699 active compounds from Table I were not tested because the supplier withdrew them; they decomposed with storage; formulations suitable for applying them to burlap could not be developed; or they were too toxic or irritating to handle safely.

EXPERIMENTAL METHODS

Candidate compounds were tested on 4- x 4-inch food bags made from standard 8-oz burlap fabric. Burlap was selected because it readily absorbs many polar and nonpolar solvents, and rodents readily learn to penetrate it.

The house mouse (Mus musculus) was used for testing because it causes extensive damage to food packaging materials; is sensitive to repellents; and is ubiquitous, easily trapped, and docile in cages. A few compounds were also tested with wild Norway rats (Rattus norvegicus) for comparison. Test rodents were caged individually in 60-cage bioassay racks and replaced with new animals as needed. Mice were either wild-trapped or drawn from a colony started from wild-trapped mice; all rats were wild-trapped.

Test compounds were dissolved or suspended in what appeared the most suitable carriers for application to burlap. No attempt was made to systematically test series of formulations for given compounds. The chemical and physical properties of most compounds did not permit formulating

them in a variety of carriers, or even always achieving standard concentrations. The objective of the barrier tests was simply to determine the best compounds formulated with the most suitable carriers that would provide the maximum protection for the longest time.

When a suitable carrier was chosen, the amount of it that was absorbed when an empty bag was saturated and run through a wringer was determined so that the amount of test compound needed to produce the desired concentration (usually 5 mg/in.^{2} for mice, 10 mg/in.^{2} for rats) could be calculated. The appropriate amount of the compound was then dissolved or suspended in the carrier, and test bags were saturated with the formulation, run through the wringer, air-dried at room temperature, and tested within a few days. When formulations contained products such as Methocel that would stiffen the burlap, treated bags were paired for testing with "untreated" bags that had been treated with the carrier and processed like treated bags. When the carrier was a volatile organic solvent, treated bags were paired with untreated bags that had not been processed.

For each barrier test, a treated and an untreated bag were filled with the rodents' standard diet (a mixture of commercial fox chow and oatmeal for mice, commercial rat pellets for rats), stapled closed, and placed overnight (16-18 hr) in an individual rodent's cage. In tests with mice, bags were placed in 50 cages the first night; with rats, in 25 cages. A test was not considered completed unless the rodent penetrated at least one bag (cut a hole large enough to obtain food); healthy animals always cut one or both bags overnight. Tests were repeated as needed the following nights (with the same or different animals, at random) until 50 animal-nights had been accumulated for the test formulation. Each morning, a count was made of the treated and untreated bags cut. After 50 animal-nights, the protection afforded by the test formulation was calculated by the formula:

$$\text{Percent damage reduction} = 100 \times \frac{U - T}{U + T}$$

where:

U = number of untreated bags cut, and
T = number of treated bags cut.

If a test formulation reduced damage by at least 50 percent, or the compound was of special interest, continued storage tests were usually run. In these cases, all uncut bags were emptied, placed in kraft paper sacks, stored in metal cabinets at room temperature, and retested one to four times, at 2 weeks to 2 years after the original test. For retesting,

treated bags were again paired with untreated bags--fresh unprocessed ones when the original formulation had contained only a volatile organic solvent, processed ones prepared along with the treated bags in all other cases (extra "untreated" bags were made for most of these test series). Again, the bags were filled with food, stapled closed, and offered to individually caged rodents overnight until either 50 animal-nights had been accumulated or too many bags had been cut to permit continued testing.

RESULTS AND DISCUSSION

Table III summarizes the results with the 123 compounds appraised for repellency to rodents by the barrier test. Compounds are listed sequentially by code number (see Appendix II for their chemical names and the page number on which they appear in Table I). The columns under "Barrier Treatment" give the concentration of the test compound, in milligrams per square inch on the treated bag, and a letter code for the carrier used in the formulations; these codes are explained at the end of the table. The remaining columns indicate the test rodent and the percent protection (= percent damage reduction) in the initial test and any continued storage tests.

The 123 compounds, in 144 formulations, were used in 149 initial tests (139 with mice and 10 with rats). In these tests 62 compounds (50 percent), in 70 formulations, were effective (provided protection of 50 percent or more). Fifty-five of these compounds (63 formulations), plus two special-interest compounds that had provided somewhat lower protection than 50 percent, were tested in one or more storage tests--a few at 2-6 weeks, most at 2-3 and 6-8 months, and a few at 1-2 years.

At 2 or 3 months, 32 of 51 compounds (60 percent) tested against mice were still effective, as were 2 of 4 tested against rats. At 6 months, 17 of 40 compounds (43 percent) were still effective against mice; neither of the 2 tested against rats were, and no further rat tests were conducted. Of the 17 compounds active enough to be tested at 1 or 2 years, 8 (47 percent) were still effective. Thus, about half the compounds were eliminated at each step in the testing procedure.

Several groups of compounds with related structures performed similarly in the initial and storage tests; compounds 5858 and 5859 and compounds 6738 and 6559 are examples. There were other series in which related compounds performed differently. For example, 4041 and 7154 are, respectively, oxygen and sulfur ring analogs of beta-nitrostyrene (BNS), one of the most effective repellents found in the food acceptance tests (Part A); both were less than 50 percent effective at 6 months, while 7147, a third compound containing the beta-nitrostyrene fragment, failed

the initial test but was effective at 6 months. Other examples of related compounds that showed differences in activity are compounds 4337, 4735, and 5601, and compounds 5625 and 5626.

Although too few compounds were evaluated by the barrier test to permit many conclusions about the relationship between chemical structure and effectiveness in repelling rodents, examination of the structure of effective compounds suggested certain patterns. The defined functional groups (two compounds were unspecified mixtures) and the number of times the groups occurred, alone or in combination, in the compounds that were effective in storage tests were as follows:

Functional group	No. times represented in compounds effective at:		
	2-3 mos.	6 mos.	1 yr.
Heterocyclic nitrogen	7	5	2
Amine	5	5	2
Thiourea	3	3	1
Amide	2	3	1
Nitrile	3	2	1
Ether	2	2	1
Halide	2	2	1
Carboxylic acid	1	2	1
Quaternary nitrogen	2	1	1
Alcohol	3	2	
Tin	3	2	
Nitro	2	2	
Thiocyanate	3	1	
Sulfide	2	1	
Thiocarbamate	2	1	
Lactam	1	1	
Heterocyclic nitrogen and sulfur		1	
Imide	3		
Ester	2		
Hydrazine	2		
Heterocyclic nitrogen and oxygen	1		
Heterocyclic oxygen	1		

Thus, all but seven of the compounds effective at 2-3 months, all but four of those effective at 6 months, and all but one of those effective at 1 year contained nitrogen in the molecule; many of the exceptions were tin complexes. In Part A, nearly all of the active compounds also had functional groups containing nitrogen. Of the compounds effective in any storage test, none contained more than three functional groups on

the molecule. This suggests that, beyond a certain point, adding active substituents reduces rather than increases biological activity; evidently, additional groups inhibit action by shielding, antagonism, or irreversible action on the activity site responsible for the original effect.

The results of the food acceptance and barrier tests led to a few commercially successful rodent repellents. In the early 1950's, a liquid formulation of BNS was marketed to prevent porcupines and beavers from damaging trees and wood products (U.S. Patents 2,335,384; 2,537,018; 2,795,555; 2,798,062). However, since BNS has a relatively high vapor pressure, this formulation evaporated too rapidly during warm weather to provide lasting protection. An attempt was made to formulate BNS for year-round application by microencapsulating BNS droplets in an epoxy complex and mixing it in a fast-drying adhesive to be sprayed on a surface. In theory, animals that attempted to gnaw through the film would rupture the capsules and release enough BNS to repel them. However, techniques for microencapsulating volatile compounds were not well developed at that time, and the epoxy coating did not retain the BNS.

Perhaps the most effective repellents found in these tests were a group of 41 tin compounds that were effective in initial barrier tests and storage tests up to 1 and 2 years. Unfortunately, their identities have not been released by the manufacturer and they could not be included in this publication. Nevertheless, the results with them clearly showed the potential of tetravalent tin complexes as repellents, and several patents were granted for stannous and stannic compounds to reduce rodent penetration of several barrier materials (U.S. Patents 3,167,473; 3,309,369; 3,389,048; 3,461,132; 3,480,712; 3,530,157; British Patent 1,268,222). In addition, a formulation of tributyltin chloride in a plasticized rubber matrix (4) was developed with U. S. Army funds and is now being used by the Army Electronics Command to protect electronic cables from rodent penetration.

Obviously, the food acceptance and barrier tests evaluated only a few of the compounds and functional groups that might be effective as rodent repellents. The test results were intended primarily as a source of data for discriminating searches to locate repellents offering a compromise between economy of production, ease of formulation, safety in handling, and effectiveness. Except for the organotin complexes mentioned above, few usable repellents were found as a direct result of this program, but this appears to have been cheifly a result of formulation problems. With recent developments in microencapsulation, time-release coatings, and multiwall laminates, it now appears profitable to reevaluate the potential of compounds found effective in these tests. Considerable attention is being directed toward ways to precisely control the release of volatile chemicals;

protect photoreactive, thermoliable, and hydrophobic compounds from degrading; and control the reactions of compounds within specific environments. Therefore, techniques should soon be available by which volatile compounds such as BNS, some tin complexes, and other highly effective but unstable chemicals reported here, can be formulated as practical rodent repellents.

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TABLE I

REPELLENCY OF COMPOUNDS TO RATS

Code No.	Classification and Name	K Value
	ACID ANHYDRIDES	
	Unsubstituted	
3397	d-Camphoric anhydride	42
3403	Cinnamic anhydride	-42
4710, 6006	4-Cyclohexene-1,2-dicarboxylic anhydride	31, 57
3337	Glutaric anhydride, β,β-dimethyl-	25
3247	1,3-Isochromandione	24
6982	Succinic anhydride, x-dodecenyl-	64
	Substituted	
5941	Bicyclo[2.2.1]hept-5-ene-2-acetic acid, 2-carboxy-1,4,5,6,7,7-hexachloro-, cyclic anhydride	46
5339	Cyclohexane-1,2-dicarboxylic anhydride, 4,5-dichloro-3,6-endoxy-	48
3911	2-Cyclohexene-1,2-dicarboxylic anhydride, 5-acetyl-3-carboxymethyl-4,4,6-trihydroxy-6-methyl-, γ-lactone	44
3378	Hemipic anhydride	-52
6787	Isatoic anhydride	36
3433	7-Oxabicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic anhydride	90
3745, 4013		60, 74
5304	Phthalic anhydride, tetrachloro-	84
6771	Succinic anhydride, p-methoxybenzyl-	-36
3246	Tartaric anhydride, diacetate	11
6797	-----, diacetyl-	37
	ACID HALIDES	
5815	2-Furoyl chloride, 5-nitro-	86

TABLE I

Code No.	Classification and Name	K Value
	ACIDS, CARBOXYLIC	
	Monosubstituted	
	Amides	
2964	Maleanilic acid, p-methyl-	63
4016	Oxanilic acid	46
5511	Phenaceturic acid	49
3740	Phthalamic acid, N-dodecyl-	31
6353	-----, N-isopropyl-, copper(II) salt	72
5533	-----, N-1-naphthyl-	65
5816	-----, N-2-naphthyl-	86
4678	Stearic acid, θ-acetamido-	13
	Amines	
4495	Acetic acid, p-aminophenylmercury(II) salt	100
3348	-----, (ethylenediamine)tetra-, disodium salt, dihydrate	-34
3349	trisodium salt, monohydrate	-115
5753	-----, 1-phenyliminodi-	55
3093	Anthranilic acid, nickel(II) salt	26
3516	Glycine, N-cyclohexyl-	47
4839	2-Naphthoic acid, 3-amino-, hydrochloride	81
3264	Octanoic acid, 2-amino-	47
	Esters	
6493	Itaconic acid, β-monoallyl ester	100
6389	Phthalic acid, monobutyl ester, copper(II) salt	67
6388	Succinic acid, x-dodecenyl-, monobutyl ester	84
	Ethers	
4540	Acetic acid, [o-(1-butenyl)phenoxy]-	95
3399	-----, 2,3-dimethoxytetramethylenebis-, mercury(II) salt	100
6816	2-Biphenylcarboxylic acid, 2'-methoxy-	37
6360	Cinnamic acid, 3,4-dimethoxy-	42
5492	-----, 4-methoxy-	-36
5502	-----, 2-methoxy-α-methyl-	47
5163	Propionic acid, 2-benzyloxy-	72
3380	-----, 2-(p-tert-butylphenoxy)-	81
2831	-----, 2-phenoxy-	61
3335	Veratric acid	20

TABLE I

Code No.	Classification and Name	K Value
	ACIDS, CARBOXYLIC	
	Monosubstituted	
	Halides	
3997	Acetic acid, p-chlorophenyl-	34
5437	Acrylic acid, α,β-dichloro-	98
3572	-----, perchloro-, sodium salt	77
3990	Adipic acid, perfluoro-	-10
2847	1-Apobornaneacetic acid, 2-chloro-	14
3620	Benzoic acid, o-chloro-, bismuth(III) salt	-44
3621	copper(II) salt	43
3080	nickel(II) salt	15
3081	-----, p-chloro-, nickel(II) salt	38
3292	-----, 3,4-dichloro-, nickel(II) salt	52
3313	Crotonic acid, α,β-dichloro-γ,γ-diphenyl-	92
3604	Hydrocinnamic acid, α,β-dibromo-	55
3409	β-Isodurylic acid, 3-bromo-	62
5839	Maleic acid, dichloro-	30
4933	Phthalic acid, 4-chloro-	69
4001	-----, perchloro-	68
3988	Succinic acid, perfluoro-	9
	Heterocyclic Compounds	
3628, 5316		-30, 51
5775	Acrylic acid, β-2-furyl-	52
3928	-----, β-2-thienyl-	-58
2855	Butyric acid, 3-indolyl-	63
3136	Coumarilic acid	77
6830	Crotonic acid, 2-furyl-	67
4161	Homopiperonylic acid	41
4163	Hydrocinnamic acid, 3,4-methylenedioxy-	11
5777	Malonic acid, furfurylidene-	53
7265	-----, 3-indolylmethyl-	20
6279	Octadecanoic acid, 9,10,12,13-diepoxy-	-17
7038	9-Propionic acid, 3,6-di-tert-butylcarbazole	62
2854	Propionic acid, 3-indolyl-	71
	Imides	
2935	Acetic acid, (1,4-methano-1,2,3,4-tetrahydrophthalimido)-	67
5979	Butyric acid, 4-phthalimido-	83
6449	Levopimaric acid, addition product with N-phenylmaleimide	-42

TABLE I

Code No.	Classification and Name	K Value
	ACIDS, CARBOXYLIC	
	Disubstituted	
	Ether-Halides	
3325	Acetic acid, (4-chloro-o-tolyloxy)-	89
3291	-----, (2,4-dichlorophenoxy)-, nickel(II) salt	42
3029	-----, (pentachlorophenoxy)-	97
5010	-----, (2,3,5,6-tetrachlorophenoxy)-	88
4189	Propionic acid, α-(o-chlorophenoxy)-	19
	Halide-Heterocyclic Compounds	
4965, 5782	2-Furoic acid, 5-bromo-	83, 93
4966, 5783	-----, 5-chloro-	90, 95
7167	-----, 3,4-dichloro-	86
7264	Nicotinic acid, 5-fluoro-	34
	Halide-Phenols	
4191, 4322	Salicylic acid, 5-bromo-	93, 90
4463	-----, 5-chloro-	100
4462	-----, 3,5-dichloro-	98
	Heterocyclic-Ketones	
5408	Octadecenoic acid, 10,11-epoxy-12-oxo-	74
5404	-----, 10,11-epoxy-9,12-dioxo-	22
	Miscellaneous	
7263	Acetic acid, [o-(N-allylcarbamoyl)phenoxy]-	-14
3047	-----, [(2-benzothiazolyl)thio]-	90
3132	Anthranilic acid, 3,5-dichloro-	56
2909	Benzoic acid, o-(p-bromobenzoyl)-	76
4320	-----, o-(p-hydroxybenzoyl)-	2
4002	-----, 4-nitro-2-sulfo-, potassium(sulfonate) salt	16
5754	Butyric acid, 4-(2-formamidoethylsulfonyl)-	27
5525	Cinnamic acid, 4-acetoxy-3-methoxy-	31
6262	-----, p-chloro-α-cyano-	60
4488	2,5-Cresotic acid, α-thiocyanato-	31
6760	Fumaramic acid, N-formyl-	64
5784	2-Furoic acid, 5-nitro-	84
4492	Isonicotinic acid, 2,6-dihydroxy-	49
5516	Malonic acid, (2-phenylacetamido)-, monoethyl ester, sodium salt	45
3784, 3909	Mucochloric acid	76, 65
3635	-----, thiosemicarbazone	68
2978	2-Naphthoic acid, 3-hydroxy-7-sulfo-	69
5409	Octadecanoic acid, 10,11-dihydroxy-9,12-dioxo-	60
3338	Opianic acid	35

TABLE I

Code No.	Classification and Name	K Value
	ACIDS, CARBOXYLIC	
	Disubstituted	
	Miscellaneous	
6315	Phthalanilic acid, 4'-(acetylsulfamoyl)-, dihydrate	21
3645	-----, 4'-(2-thiazolylsulfamoyl)-	24
6014	Pyruvic acid, (o-nitrophenyl)-	51
5534	γ-Resorcylic acid, 4-amino-, hydrogensulfate	64
5521	Valine, N-acetyl-3-mercapto-	34
	Polysubstituted	
5117	Acetic acid, [(2-amino-5-ethoxyphenyl)thio]-	81
5258	-----, (2-imino-4-oxo-5-thiazolidinyl)-	-5
7224	Anthranilic acid, 4-chloro-N-(p-methoxyphenyl)-	69
3452	Benzoic acid, 6-benzoyl-3-chloro-2-nitro-	84
3413	-----, 2-hydroxymercuri-3-nitro-, γ-lactone	98
5801	DL-2-Furanserine	48
4333	Glycine, dimethyl-, [2-[2-[p-(1,1,3,3-tetramethylbutyl)phenoxy]ethoxy]ethyl]betaine	60
5454	Glycolic acid, [(4,5-dihydro-2-imidazolyl)thio]-, hydrochloride	48
4751*	2-Pyrazoline-3-carboxylic acid, 5-oxo-1-(o-sulfophenyl)-4-(o-sulfophenylazo)-, salt with 2 f. wt. dicyclohexylamine	100
5908	Pyruvic acid, (4-hydroxy-3-methoxyphenyl)-, oxime	27
5528	-----, (4-hydroxy-3-methoxyphenyl)-2-thio-	71
5996	3-Quinolinecarboxylic acid, 7-chloro-4-hydroxy-	59
6639	Succinanilic acid, 4'-[p-(2,5-dimethyl-1-pyrrolyl)-phenylsulfonyl]-	53
	ALCOHOLS	
	Unsubstituted	
6029	Bicyclo[3.1.1]hept-3-en-2-ol, d-cis-2,6,6-trimethyl-	32
6030	-----, d-trans-2,6,6-trimethyl-	32
6364	3-Butyn-2-ol, 2-phenyl-	78
4867	Cedrol	65
5487	Cinnamyl alcohol	60
6365	Cyclohexanol, 4-tert-butyl-1-ethynyl-	56
3141	-----, 1-ethynyl-	36
6361	-----, 1,1'-ethynylenedi-	47
3248	-----, 1-ethynyl-2-methyl-	8
2832	-----, cis(and trans)-2-isopropyl-	71
4194	-----, 2-phenyl-	94

TABLE I

Code No.	Classification and Name	K Value
	ALCOHOLS	
	Monosubstituted	
	Amines	
6447	4-Nonanol, 1-dimethylamino-6,8,8-trimethyl-	86
3164	Octylamine, N,N-bis(2-hydroxyethyl)-, compound with 1/3 f. wt. boron trifluoride	73
6469	9-Phenanthrenemethanol, α-(diisopentylaminomethyl)-1;2,3,4-tetrahydro-, hydrochloride	92
3296	Phenethyl alcohol, p-amino-	31
6366	1,3-Propanediol, 2-amino-2-methyl, salt with 1 f. wt. neoabietic acid	62
6088	1,2-Propanediol, 3-(N-allylanilino)-	70
4820	-----, 3,3'-(1-naphthylamino)bis-	38
2715	2-Propanol, 2,2'-aminobis-, salt with 1 f. wt. fluosilicic acid	85
4819	-----, 1,1'-anilinobis-	51
6060	-----, 1,3-bis(dimethylamino)-, dihydrochloride	56
2856	-----, 1-cyclohexylamino-	75
6629	3-Retenemethanol, α-(1-dibutylaminoethyl)-, hydrochloride	98
6630	-----, α-(1-dihexylaminoethyl)-, hydrochloride	77
6537	-----, α-(diisohexylaminomethyl)-, hydrochloride	65
3161	Tetradecylamine, N,N-bis(2-hydroxyethyl)-, compound with 1 f. wt. boron trifluoride	78
3162	compound with 1/2 f. wt. boron trifluoride	90
3163	compound with 1/3 f. wt. boron trifluoride	85
	Carbamates	
6811	Carbamic acid, 2-hydroxyethyl ester	-57
5017	2-hydroxypropyl ester	-3
6814	-----, benzyl-, 2-hydroxyethyl ester	58
5019	-----, bis(2-hydroxyethyl)-, 2-hydroxyethyl ester	39
5027, 6808	-----, dodecyl-, 2-hydroxyethyl ester	59, 64
5021	-----, ethylenedi-, bis(2-hydroxyethyl) ester	7
5188	-----, hexadecyl-, 1(or 2)-monoester with 1,2-propanediol	74
5755	-----, (3-hydroxy-2,2-dimethylpropyl)-, ethyl ester	45
5018	-----, 2-hydroxyethyl-, 2-hydroxyethyl ester	22
6802	2-hydroxypropyl ester	-17
5022	-----, isopentyl-, 2-hydroxyethyl ester	56
5030	-----, octadecyl-, 2-hydroxyethyl ester	50
	Esters	
6491	Citric acid, triallyl ester	88
4169	Hydrocinnamic acid, β-ethyl-β-hydroxy-, ethyl ester	54
3275	Lactic acid, dodecyl ester	32

TABLE I

Code No.	Classification and Name	K Value
	ALCOHOLS	
	Monosubstituted	
	Ethers	
7204	Benzyl alcohol, p-methoxy-	80
4474	Ethanol, 2-(2-biphenylyloxy)-	52
4709	-----, 2,2'-[isopropylidene bis(p-phenyleneoxy)]di-	59
3943	-----, 2-(x,x-xylyloxy)-	76
2837	1-Propanol, 3-(1-naphthyloxy)-	73
2839	2-Propanol, 1-(4-biphenylyloxy)-	-48
3381	-----, 1-(p-tert-butylphenoxy)-	59
3709	-----, 1-(p-cyclohexylphenoxy)-	39
	Halides	
3083	9,10-Anthracenediol, 1-chloro-9,10-dihydro-9,10-diphenyl-	42
3084	-----, 2-chloro-9,10-dihydro-9,10-diphenyl-	48
2848	1-Apobornaneethanol, 2-chloro-	69
5231	Benzyl alcohol, 2,4-dichloro-	63
5232	-----, 3,4-dichloro-	57
5939	1-Heptanol, 2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoro-	27
5940	1-Nonanol, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-hexadecafluoro-	72
5938	1-Pentanol, 2,2,3,3,4,4,5,5-octafluoro-	18
7164	1-Pentyn-3-ol, 1-chloro-3-ethyl-	66
5942	1-Propanol, 2,2,3,3-tetrafluoro-	20
5009	2-Propanol, 1,1,1,3,3,3-hexachloro-	92
3340	-----, 1-iodomercuri-	97
3085	-----, 1,1,1-tribromo-2-methyl-	69
5237	2-Propyn-1-ol, 1,1-bis(p-chlorophenyl)-	91
	Heterocyclic Compounds	
3718	Cinchonine, salt with 1 f. wt. mandelic acid	96
5741	Ethanol, 2-(2-heptadecylimidazol-1-yl)-	(T)
6801	Imidazole, 1-(2-hydroxyethyl)-	51
4318, 7006*	1-Imidazolineethanol, x-heptadecen-2-yl-	86, 99
4319	-----, 2-heptadecyl-	90
4317	-----, 2-tridecyl-	90
3948	4-Morpholineethanol	49
6812	3-Oxazolidineethanol, 2-nonyl-	78
6381	1-Piperidineethanol, α-carvacryl-, hydrochloride	88
4166	Piperonal, diethyl acetal	43
6286	1(4H)-Pyrimidineethanol, 2-heptadecyl-5,6-dihydro-	78
3251	2-Quinolineethanol	46

TABIE I

Code No.	Classification and Name	K Value
	ALCOHOLS	
	Monosubstituted	
	Imides	
6738*	Maleimide, N-hydroxymethyl-	99
3257	Phthalimide, N-2-hydroxyethyl-	46
6050	-----, N-(3-hydroxy-4-hexenyl)-	76
5987	-----, N-(3-hydroxy-3-methylbutyl)-	76
6049	-----, N-(3-hydroxy-3-methylpentyl)-	71
	Ketones	
6005	Acetophenone, 2-hydroxy-	65
7200	Adipoin	75
5494	2-Butanone, 3-hydroxy-3-methyl-	-23
4165	Cyclohexanone, 3-hydroxy-3-phenyl-	78
5272	-----, 2,2,6,6-tetrakis(hydroxymethyl)-	48
	Phenols	
6818	2-Biphenylmethanol, 2'-hydroxy-α,α-dimethyl-	79
4650	Phenol, p-(3-hydroxy-3-methylbutyl)-	93
	Quaternary Nitrogen Compounds	
	Ammonium compounds.	
4501	benzylbis(2-hydroxyethyl)dodecyl----- chloride	90
4503	benzylbis(2-hydroxyethyl)hexadecyl----- chloride	98
4502	benzylbis(2-hydroxyethyl)tetradecyl----- chloride	98
5420	decamethylenebis[(2-hydroxyethyl)dimethyl----- bromide	53
5423	decamethylenebis[bis(2-hydroxyethyl)methyl----- bromide	33
6545	hexadecyl(2-hydroxyethyl)methyl(2,3,4,5,6-pentahydroxyhexyl)----- bromide	84
	Imidazolium compounds.	
6998*	1(or 3)-benzyl-2-coco-1-(2-hydroxyethyl)-2- ----- chloride, 60 percent in isopropyl alcohol	92
7000*	1(or 3)-benzyl-x-heptadecen-2-yl-1-(2-hydroxyethyl)-2------ chloride, 60 percent in isopropyl alcohol	92
	Morpholinium compounds.	
3949	4,4-bis(2-hydroxyethyl)----- chloride	-5
	Sulfonic Acids	
4012	Isethionic acid	-19
5391	Methanesulfonic acid, hydroxy-, sodium salt	36
	Thiocarbamates	
3960	Carbamic acid, bis(2-hydroxyethyl)dithio-, copper(II) salt	90
3961	mercury(II) salt	-16

TABLE I

Code No.	Classification and Name	K Value
	ALCOHOLS	
	Monosubstituted	
	Thioureas	
5658	Ethanol, 2-[(2-imidazolinyl)thio]-, hydrochloride	74
5632	Pseudourea, 2-[(2-hydroxyethyl)thio]-, complex with ethylene glycol and hydrochloric acid	82
2783	Urea, 1-ethyl-3-(2-hydroxyethyl)-2-thio-	81
	Ureas	
4327	Glycoluril, 1,3,4,6-tetrakis(hydroxymethyl)-	57
6396	2-Imidazolidinone, 1-(2-hydroxyethyl)-	-37
	Miscellaneous	
7045	Benzoin, anti-oxime	98
5099	1,2-Ethanediol, cyano-	(T)
3410	Ethanol, 2,2'-(decamethylenedithio)di-	61
3436	-----, 2,2'-sulfinyldi-	-44
5387	Phosphonium compounds, tetrakis(hydroxymethyl)----- chloride	83
4302	Pivalaldehyde, hydroxy-	41
5797	Semicarbazide, 2-(2-hydroxyethyl)-	93
	Disubstituted	
	Amide-Halides	
5129*	Acetamide, 2-chloro-N-dodecyl-N-(2-hydroxyethyl)-	95
7214	-----, 2-(p-chlorophenyl)-N-(2-hydroxyethyl)-	69
7144*	2-Propanol, 3-benzamido-1,1,1-trichloro-	94
	Amine-Ethers	
6622	1-Naphthalenemethanol, α-(2-dibutylamino-1,1-dimethylethyl)-4-methoxy-, hydrochloride	94
6538	-----, α-(dibutylaminomethyl)-2-methoxy-, hydrochloride	92
6658	-----, α-(dipentylaminomethyl)-2-methoxy-, hydrochloride	96
6536	9-Phenanthrenemethanol, α-(N-butyl-p-methoxyanilinomethyl)-1,2,3,4-tetrahydro-, hydrochloride	85
	Amine-Halides	
5111	Aniline, o-chloro-N,N-bis(2-hydroxypropyl)-	83
6559	Benzyl alcohol, o-chloro-α-(dioctylaminomethyl)-	91

TABLE I

Code No.	Classification and Name	K Value
	ALCOHOLS	
	Disubstituted	
	Amine-Halides	
6672	Ethanol, 2-(p-bromobenzylamino)-, hydrochloride	73
5105	-----, 2-(m-chloroanilino)-	81
5103	-----, 2-(o-chloroanilino)-	82
5333	-----, 2,2'-(m-chloroanilino)bis-	65
5120	-----, 2-(2,5-dichloroanilino)-	77
6676	1-Naphthalenemethanol, 4-bromo-α-(dodecylamino-methyl)-	42
6669	-----, 4-chloro-α-(2-diethylaminoethyl)-, hydrochloride, hydrate	100
6640	-----, 2-chloro-α-(dihexylaminomethyl)-, hydrochloride	93
6670	-----, 2-chloro-α-(dipentylaminomethyl)-, hydrochloride	96
4813	2-Propanol, 1,1'-o-chloroanilinobis-	94
5334	-----, 1-chloro-3-(N-ethyl-m-toluidino)-	80
	Amine-Phenols	
6662	Ethanol, 2-(5-tert-butyl-2-hydroxybenzylamino)-	98
6655	-----, 2,2'-(5-tert-butyl-2-hydroxybenzyl-amino)bis-	98
6702	-----, 2,2'-(5-tert-butyl-2-hydroxy-3-phenyl-benzylamino)bis-	99
6654	-----, 2-[5-(1,1-dimethylpropyl)-2-hydroxybenzyl-amino]-	97
6018	-----, 2,2'-(p-hydroxyanilino)bis-	44
5330	-----, 2-(o-hydroxybenzylamino)-	34
6649	-----, 2-(2-hydroxy-3-phenylbenzylamino)-	83
	Carbamate-Halides	
4749	Carbamic acid, 2,2,3-trichloro-1-hydroxybutyl-, butyl ester	92
5474	-----, 2,2,2-trichloro-1-hydroxyethyl-, isopropyl ester	25
	Ether-Halides	
3944	Ethanol, 2-(pentachlorophenoxy)-	94
6441	1,2-Propanediol, 3-(p-chlorophenoxy)-	65
3386	2-Propanol, 1-(p-chlorophenoxy)-	64

TABLE I

Code No.	Classification and Name	K Value
	ALCOHOLS	
	Disubstituted	
	Ether-Quaternary Nitrogen Compounds	
	Ammonium compounds.	
4334	benzyl(2-hydroxyethyl)methyl[2-[2-[x-(1,1,3,3-tetramethylbutyl)phenoxy]ethoxy]ethyl]----- chloride	97
	Morpholinium compounds.	
3950	4,4'-oxydiethylenebis[4-(2-hydroxyethyl)----- chloride	-77
	Halide-Heterocyclic Compounds	
6671	4-Morpholineethanol, α-(p-bromophenyl)-3-ethyl-, hydrochloride	92
4468	2-Pyridineethanol, α-(trichloromethyl)-	97
6318	4-Quinolinemethanol, 8-chloro-2-(p-chlorophenyl)-α-2-piperidyl-	92
	Halide-Nitro Compounds	
4470	Benzyl alcohol, 3,4-dichloro-α-1-nitroethyl-	87
7261	2-Butanol, 1,1,1-trichloro-3-nitro-	19
7142*, 7143	2-Propanol, 1,1,1-trichloro-3-nitro-	88, 97
	Halide-Phenols	
7100, 7291*	2,2'-Methylenebis(4-chloro-6-hydroxymethylphenol)	66, 75
6248	Saligenin, 5-chloro-	90
	Halide-Phosphorus Compounds	
4464	α-Toluenephosphonic acid, o-chloro-α-hydroxy-, diethyl ester	85
2980	-----, 2,4-dichloro-α-hydroxy-, diethyl ester	86
	Halide-Quaternary Nitrogen Compounds	
	Ammonium compounds.	
4506	bis(2-hydroxyethyl)(2,4-dichlorobenzyl)hexadecyl----- chloride	97
4507	bis(2-hydroxyethyl)(3,4-dichlorobenzyl)hexadecyl----- chloride	88
4504	bis(2-hydroxyethyl)(2,4-dichlorobenzyl)tetradecyl----- chloride	99
4505	bis(2-hydroxyethyl)(3,4-dichlorobenzyl)tetradecyl----- chloride	99
	Imidazolium compounds.	
7005	1(or 3)-(4-chlorobutyl)-x-heptadecen-2-yl-1-(2-hydroxyethyl)-2------ chloride, 60 percent in isopropyl alcohol	97

TABLE I

Code No.	Classification and Name	K Value
	ALCOHOLS	
	Disubstituted	
	Halide-Ureas	
5891	Urea, 3,3-bis(2-hydroxyethyl)-1-(m-chlorophenyl)-	44
2994	-----, 1,3-bis(2,2,2-trichloro-1-hydroxyethyl)-	37
2993	-----, 1-(2,2,2-trichloro-1-hydroxyethyl)-	36
5890	-----, 3-(2,2,2-trichloro-1-hydroxyethyl)-1-m-tolyl-	62
	Heterocyclic-Ketones	
6303	d-Fructose, 1-deoxy-1-morpholino-	-4
4009	Piperonyloin	-14
	Miscellaneous	
4115	Acetamide, 2-(2-hydroxyethoxy)-	28
4986, 5126	Benzamide, N-(2-hydroxyethyl)-p-nitro-	77, 92
5878	Benzoic acid, p-[bis(2-hydroxyethyl)amino]-, ethyl ester	43
6620	Benzoin, 4,4'-dichloro-	72
4475	Benzophenone, 4-(2-hydroxyethoxy)-	62
4298, 4857	Butyronitrile, 2-hydroxy-4-(methylthio)-	93, 87
3641	Ethanol, 2-[(2-benzothiazolyl)thio]-	97
5695	-----, 2-(2,6-diamino-s-triazin-4-ylthio)-	46
4895	-----, 2-(2,4-dinitroanilino)-	84
4478	-----, 2-[2-nitro-4-(tert-pentyl)phenoxy]-	88
5311, 5789	2-Furfuryl alcohol, 5-nitro-	92, 94
2860	D-Glucoanilide, p-sulfamoyl-	-21
2721	α-D-Glucoside, 1-allyl-	32
3972	D-Glucoside, 1-[bis(2-hydroxyethyl)amino]-	-27
4096	2-Imidazolineethanol, with 2-decyl and 2-dodecyl acetates	93
5327	Maleinimide, N-m-[bis(2-hydroxyethyl)amino]phenyl-	-3
6758	Maleuric acid, 2-hydroxyethyl ester	52
5370	Mandelic acid, 2-chloroethyl ester	80
3962	4-Morpholinecarbodithioic acid, 2-hydroxyethyl ester	49
	Morpholinium compounds.	
6546	4-benzyl-4-[(2,5,8,11,14,17,20-heptamethyl-3,6,9,12,-15,18,21-heptoxo-23-hydroxy)tetracosyl]----- chloride	74
5409	Octadecanoic acid, 10,11-dihydroxy-9,12-dioxo-	60
	Piperidinium compounds.	
6302	1-ethyl-3-hydroxy-1-methyl----- bromide, benzilic acid ester	86
6293	1-Propanol, 3-(4-hydroxy-3-methoxyphenyl)-	35
4927	Propionitrile, 2-[N'-(2-hydroxyethyl)anilino]-, sulfate	56

TABLE I

Code No.	Classification and Name	K Value
	ALCOHOLS	
	Disubstituted	
	Miscellaneous	
2979	α-Toluenephosphonic acid, α,p-dihydroxy-	40
2996	-----, α-hydroxy-m-nitro-, diethyl ester	81
6410*	Urea, 3-(2-hydroxyethyl)-1-(1,1-dimethyl-3-oxobutyl)-2-thio-	98
	Polysubstituted	
2995	Acetophenone, 4'-[(2,2,2-trichloro-1-hydroxyethyl)-amino]-	71
4935	2-Anisidineethanol, α-chloromethyl-	67
6558	Benzyl alcohol, α-(benzylethylaminomethyl)-3-chloro-4-ethoxy-, hydrochloride	92
6557	-----, 3-chloro-4-ethoxy-α-(phenethylamino-methyl)-, hydrochloride	66
3911	2-Cyclohexene-1,2-dicarboxylic anhydride, 5-acetyl-3-carboxymethyl-4,6,6-trihydroxy-6-methyl-, γ-lactone	44
4752	Ethanol, 1-(4-amino-6-phenyl-s-triazin-2-yl-amino)-2,2,2-trichloro-, and s-Triazine, 2,4-bis(2,2,2-trichloro-1-hydroxyethylamino)-6-phenyl-	25
6674	-----, 2-(3-bromo-5-tert-butyl-2-hydroxybenzyl-amino)-	98
6675	-----, 2-(5-tert-butyl-3-chloro-2-hydroxybenzyl-amino)-	100
6094	-----, 2-[N-(3-chloroallyl)-5-chloro-3-methoxy-anilino]-	80
4932	-----, 2-(2-chloro-3,5-dinitrobenzenesulfonamido)-	93
6316	-----, 2-[[4-(7-chloro-4-quinolylamino)pentyl]-ethylamino]-, monosulfate	99
4469	-----, 2,2,2-trichloro-1-salicylamido-	80
5801	DL-2-Furanserine	48
5454	Glycolic acid, [(4,5-dihydro-2-imidazolyl)thio]-, hydrochloride	48
6298	Hydracrylic acid, 2-bromo-3-(3,4-dimethoxy-phenyl)-, methyl ester	9
2800	2-Naphthamide, 1,2,3,4-tetrahydro-6-hydroxy-4-(4-hydroxy-3-methoxyphenyl)-3-hydroxymethyl-7-methoxy-, from α-conidendrin	18
5678	Phosphonic acid, (2,2,3-trichloro-1-hydroxybutyl)-, bis-[2-(2-thiocyanatoethoxy)ethyl] ester	84
5679	-----, (2,2,2-trichloro-1-hydroxyethyl)-, bis[2-(2-thiocyanatoethoxy)ethyl] ester	84

TABLE I

Code No.	Classification and Name	K Value
	ALCOHOLS	
	Polysubstituted	
6667	2-Propanol, 1-(7-chloro-4-quinolylamino)-3-dimethylamino-, diphosphate	97
6309	Protocatechuyl alcohol, α-[1-(p-methoxyphenyl)-2-propylaminomethyl]-, hydrochloride	89
6368	4H-Pyran-4-one, 2-benzoyl-3-hydroxy-6-(hydroxymethyl)-	13
6319	4-Quinolinemethanol, 7-chloro-2-(p-chlorophenyl)-α-(dimethylaminomethyl)-, hydrochloride	94
6320	-----, 3-(p-chlorophenyl)-α-(diethylaminomethyl)-6-methoxy-	75
6540	-----, α-(3-dibutylaminopropyl)-6-methoxy-, hydrochloride	93
6719	Salicylamide, 5-chloro-N-(2-hydroxyethyl)-	84
6721	-----, 5-chloro-N-(3-hydroxypropyl)-	94
	ALDEHYDES	
	Unsubstituted	
5223	α-Campholenaldehyde	56
5390	Cinnamaldehyde	73
5497	-----, α-methyl-	57
6785	Heptaldehyde bisulfite	37
7202	Hydrocinnamaldehyde	97
4711	Isobutyraldehyde, bis(2-methylallyl) acetal	96
	Monosubstituted	
	Ethers	
7209	Benzaldehyde, o-methoxy-	55
3249	Glutaraldehyde, α-methoxymethyl-α,γ-dimethyl-	36
3252	1-Naphthaldehyde, 2-ethoxy-	-1
	Nitro Compounds	
3897	Benzaldehyde, m-nitro-	51
3998	-----, p-nitro-	74
	Miscellaneous	
3996	Butyraldehyde, α,α,β-trichloro-	40
4302	Pivaldehyde, hydroxy-	41
3612	2-Pyrrolecarboxaldehyde	77

TABLE I

Code No.	Classification and Name	K Value
	ALDEHYDES	
	Polysubstituted	
7047	Butyraldehyde, α,α,β-trichloro-, and propionamide	95
6760	Fumaramic acid, N-formyl-	64
5313, 5788	2-Furaldehyde, 5-nitro-	96, 95
3784, 3909	Mucochloric acid	65, 76
3338	Opianic acid	35
4260	Salicylaldehyde, 3,5-dichloro-	96
	AMIDES	
	Unsubstituted	
	Monobasic Acids	
6091	Acetamide, N-(5-acenaphthenyl)-	71
4802, 5114	-----, N-allyl-	88, 89
4872	-----, N-tert-butyl-, hydrobromide	49
3489	-----, N-cyclohexyl-N-methyl-	91
3492	-----, N-cyclohexyl-N-propyl-	72
6134	-----, N,N-dibenzyl-	94
6133	-----, N,N-dimethyl-	31
3529	-----, N,N-dipentyl-	95
4133	-----, N,N-diphenyl-	83
6119	-----, N,N'-ethylenebis-	38
6026	-----, N-2-fluorenyl-	80
6687	-----, N-isobornyl-	72
6135	-----, N-2(or 3?)-pentyl-	70
6136	-----, N,N'-2,5-tolylenebis-	29
3327	Acetanilide	46
6116	-----, N-butyl-	80
3018	-----, N-cyclohexyl-	77
5042	-----, N-ethyl-	76
6129	-----, N-isopentyl-	94
6112	-----, N-methyl-	77
6117	-----, N-pentyl-	88
6118	-----, p-2(or 3?)-pentyl-	49
3443, 5354	-----, o-phenyl-	94, 34
3261	-----, p-phenyl-	57
6224	Acrylamide	63
4568*, 4787 6229	-----, N-tert-butyl-	92, 89 71
4477, 4830	-----, N-cyclohexyl-	71, 67
6095	-----, N-(2,2-dimethylnorborn-3-ylmethyl)-	75
5133	-----, N-isobornyl-	87

TABLE I

Code No.	Classification and Name	K Value
	AMIDES	
	Unsubstituted	
	Monobasic Acids	
3971	Acrylamide, N-isopropyl-	96
4581	polymer	35
4567	-----, N-isopropyl-2-methyl-	88
4825	-----, methylenebis-	56
4822, 5115	-----, N-methyl-	94, 98
4574	-----, N-(1,1,3,3-tetramethylbutyl)-	100
4722	Acrylanilide	88
6419	Benzamide, N-allyl-	88
6420	-----, N-butyl-	95
6422	-----, N-sec-butyl-	64
6423	-----, N-tert-butyl-	84
3502	-----, N-cyclohexyl-	70
6416	-----, N-ethyl-	-9
6421	-----, N-isobutyl-	63
6418	-----, N-isopropyl-	56
6415	-----, N-methyl-	3
6432	-----, N-pentyl-	87
6417	-----, N-propyl-	44
4579	-----, N-(1,1,3,3-tetramethylbutyl)-	80
6426	-----, N-m-tolyl-	24
6425	-----, N-o-tolyl-	36
6427	-----, N-p-tolyl-	55
7057	Benzanilide	66
6152	Butyramide, N-benzyl-	51
5064	-----, N-butyl-	96
6145	-----, N-sec-butyl-	68
4755, 6154	-----, N-cyclohexyl-	86, 83
6150	-----, N,N-dibenzyl-	89
6146	-----, N,N-dibutyl-	98
6141	-----, N,N-diethyl-	63
6143	-----, N,N-diisopropyl-	71
6149	-----, N,N-dipentyl-	86
6151	-----, N,N-dipropyl-	83
7050	-----, 2-ethyl-	90
6144	-----, N-isobutyl-	70
6158	-----, N-1-naphthyl-	73
6179	-----, N-2-naphthyl-	71
6147	-----, N-pentyl-	90
6148	-----, N-2(or 3?)-pentyl-	92
6142	-----, N-propyl-	47

TABLE I

Code No.	Classification and Name	K Value
	AMIDES	
	Unsubstituted	
	Monobasic Acids	
5850, 7173	Butryanilide	72, 87
5062	-----, N-butyl-	99
5061	-----, N-ethyl-	100
5063	-----, N-isopentyl-	100
5060	-----, N-methyl-	99
6140	-----, N-pentyl-	98
5071	m-Butyrotoluidide	86
5072	o-Butyrotoluidide	36
5074	p-Butyrotoluidide	100
5241	3-Camphenilaneacetamide	87
5248	3-Camphenilaneacetanilide	85
3902	Cinnamamide, N,N-diethyl-	82
7079	Cinnamanilide	63
5104	Crotonamide, N-allyl-	91
3140	m-Crotonotoluidide, N-ethyl-	94
4180	Cyclohexaneacetamide, 4-phenyl-	75
6254	Diacetamide, 2,2'-diphenyl-	-10
3534	Dodecanamide, N-cyclohexyl-	17
2889, 7056	Dodecananilide	-145, 33
6161	Formamide, N-butyl-	43
6163	-----, N-sec-butyl-	71
5381	-----, N-tert-butyl-	96
6173	-----, N,N-dibenzyl-	54
6166	-----, N,N-dibutyl-	88
6196	-----, N,N-dicyclohexyl-	89
6159	-----, N,N-diethyl-	32
6165	-----, N,N-diisopropyl-	88
6172	-----, N,N-dioctyl-	49
6168	-----, N,N-dipentyl-	95
6164	-----, N,N-dipropyl-	78
6170	-----, N-heptyl-	53
5923	-----, N,N'-hexamethylenebis-	33
6169	-----, N-2-hexyl-	94
6162	-----, N-isobutyl-	68
6171	-----, N-octyl-	69
6167	-----, N-2(or 3?)-pentyl-	99
6160	-----, N-propyl-	38
6175	Formanilide, N-butyl-	85
6174	-----, N-ethyl-	64
6177	-----, N-isopentyl-	98
6176	-----, N-pentyl-	95
3830	-----, o-phenyl-	50

TABLE I

Code No.	Classification and Name	K Value
	AMIDES	
	Unsubstituted	
	Monobasic Acids	
7068	Hexanilide	76
4571	Isobutyramide, N-tert-butyl-	89
4573*, 4788		99, 99
5440*	-----, N-cyclohexyl-	87
3879	-----, N,N-diethyl	56
6688	-----, N-isobornyl-	94
4569	-----, N-isopropyl-	88
4576	-----, N-(1,1,3,3-tetramethylbutyl)-	97
5849	Isobutyranilide	81
7048	Isovaleramide	65
2891	Linoleanilide, dimer	-120
5025	Methacrylanilide	80
3124	Oleamide, N-octadecyl-	-30
6281	Piperidine, 1-benzoyl-	67
6209	Pivalamide, N,N-diethyl-	67
5011	Pivalanilide	89
6114	Propionamide, N,N'-p-phenylenebis-	10
7065	Propionanilide	70
6107	-----, p-acetamido-	42
5044	-----, N-butyl-	85
5043	-----, N-ethyl-	92
6138	-----, N-isopentyl-	80
6113	-----, N-methyl-	45
6137	-----, N-pentyl-	88
6139	-----, p-2(or 3?)-pentyl-	93
6109	-----, o-phenyl-	61
6085	Sorbamide, N-isobutyl-	52
6370*	x-Toluamide, N,N-diethyl-	88
5820	Toluamide, N,N-diethyl, chiefly m- isomer	82
	Unsubstituted	
	Polybasic Acids	
3199	Decanediamide	-66
5425	-----, N,N'-dicyclohexyl-	-31
5328	-----, N,N'-diethylene-	-12
5427	-----, N,N,N',N'-tetracyclohexyl-	32
3117	Fumaramide	19
2951	Glutaranilide	-45
4578	Hexanediamide, N,N'-di-tert-butyl-	57
2940	Itaconamide	22

TABLE I

Code No.	Classification and Name	K Value
	AMIDES	
	Unsubstituted	
	Polybasic Acids	
7174	Malonanilide	56
6695	-----, 2-benzylidene-	54
3717	p-Malonotoluidide	-38
5285	Oxamide, N,N'-dicyclohexyl-	-48
5283	-----, N,N'-diisopropyl-	37
3389	-----, N,N'-dimethyl-	-29
5966	Phthalamide, N,N'-dibenzyl-	41
5960	-----, N,N'-dibutyl-N,N'-diphenyl-	31
5957	-----, N,N'-dicyclohexyl-	46
5964	-----, N,N'-diisopropyl-	30
5958	-----, N,N'-dipentyl-	80
5959	-----, N,N'-dipentyl-N,N'-diphenyl-	66
5965	-----, N,N'-dipropyl-	70
	Monosubstituted	
	Acids	
4803	Acrylic acid, 2-acetamido-, ammonium salt	48
4756	Anthranilic acid, N-butyryl-	64
4363	-----, N,N'-oxalyl, di-	63
2953	Citraconanilic acid, p-methyl-	78
3442	Hexanoic acid, ε-benzamido-	79
6750	Maleamic acid, N-isopropyl-	61
5136	-----, N-methyl-	54
6751	-----, N-phenyl-	60
2964	Maleanilic acid, p-methyl-	63
4016	Oxanilic acid	46
5511	Phenaceturic acid	49
3740	Phthalamic acid, N-dodecyl-	31
6353	-----, N-isopropyl-, copper(II) salt	72
5533	-----, N-1-naphthyl-	65
5816	-----, N-2-naphthyl-	86
4678	Stearic acid, θ-acetamido-	13
	Alcohols	
6444	Hexanamide, 2-ethyl-N-(2-hydroxypropyl)-	69
4570*	Lactamide, N-tert-butyl-	92
2999	-----, N-(2-hydroxy-1,1-dimethylethyl)-	34
4577	-----, N-isobornyl-	96
5134	Malonamide, N,N'-bis(2-hydroxyethyl)-	51
6786	Oleamide, N,N'-ethylenebis[12-hydroxy-	37
6783	-----, 12-hydroxy-N-(2-hydroxyethyl)-	68
3412	Oxamide, N,N'-bis(2-hydroxyethyl)-	1

TABLE I

Code No.	Classification and Name	K Value
	AMIDES	
	Monosubstituted	
	Alcohols	
4791	Propionamide, N-tert-butyl-2-hydroxy-	67
4792	-----, N-(1,1-diethylbutyl)-3-hydroxy-	82
6096	-----, N-(3-hydroxy-2,2-dimethylpropyl)-3-hydroxy-2,2-dimethyl-	54
4793*	-----, 2-hydroxy-N-isobornyl-	97
4580	-----, 3-hydroxy-N-isobornyl-	79
6089	-----, 3-hydroxy-N-isopropyl-	50
4575*	-----, 3-hydroxy-N-(1,1,3,3-tetramethylbutyl)-	94
6784	Stearamide, N,N'-ethylenebis[12-hydroxy-	-27
6782	-----, 12-hydroxy-N-(2-hydroxyethyl)-	8
6098	Terephthalamide, N,N'-bis(5-hydroxypentyl)-	-5
	Amines	
4804	Acetamide, 2-cyclohexylamino-	89
6122	Acetanilide, 4'-dimethylamino-	89
4837	-----, 4'-isobutylamino-	100
2913	2',4'-Benzoxylidide, 5'-amino-	94
3130	Crotonanilide, N-sec-butyl-4'-(sec-butylamino)-	75
5109	Oleamide, N-(3-diethylaminopropyl)-	87
4810	Sebacamide, N,N'-bis(2-aminoethyl)-	59
	Azo Compounds	
5050	Acetanilide, 4'-phenylazo-	72
5051	o-Acetotoluidide, 4'-(m-tolylazo)-	70
	Esters	
4841	Acetamide, N-2-(1-acetoxy-2-methylpropyl)-	61
4816	-----, N-[2,5-bis(acetoxy)pentyl]-	28
4828	-----, N-bis(ethoxycarbonyl)methyl-	29
4934	-----, N,N'-2,7-(2,7-dimethyloctylene)-bis[2-ethoxycarbonyl-	63
5518	-----, N-(ethoxycarbonylmethyl)-2-mesityl-	49
3441	Acetanilide, p-ethoxycarbonyl-	59
6121	-----, m-hydroxy-, acetate	47
5041	-----, p-hydroxy-, acetate	69
3294	Lactamide, acetate	24
3295	-----, N-butyl-, lauric acid ester	14
4572	-----, N-tert-butyl-, acetate	89
4118	Lactanilide, α-ethylcaproic acid ester	57
5171, 5483	Oxanilic acid, ethyl ester	58, 41
4677	Palmitamide, N-(2-hydroxyethyl)-, acetate	-2

TABLE I

Code No.	Classification and Name	K Value
	AMIDES	
	Monosubstituted	
	Ethers	
6124	Acetanilide, 2',5'-diethoxy-	68
6123	-----, 2',5'-dimethoxy-	53
4999	Anisamide, N-allyl-	95
6102	-----, N-benzyl-	57
6103	-----, N-cyclohexyl-	50
6100	-----, N,N-diethyl-	84
6101	-----, N,N-diisopropyl-	79
4987	-----, N-ethyl-	75
4997	-----, N-isobutyl-	80
4990	-----, N-isopropyl-	96
4988	-----, N-methyl-	74
4989	-----, N-propyl-	88
6104	Anisanilide	38
5005	p-Anisanisidide	-39
6189	Benzamide, N-benzyl-o-ethoxy-	78
6220	-----, N-benzyl-p-ethoxy-	5
6185	-----, N-butyl-o-ethoxy-	76
6215	-----, N-butyl-p-ethoxy-	75
6193	-----, N-sec-butyl-o-ethoxy-	84
6218	-----, N-sec-butyl-p-ethoxy-	45
6203	-----, N-cyclohexyl-o-ethoxy-	50
6219	-----, N-cyclohexyl-p-ethoxy-	38
6194	-----, N,N-dibenzyl-o-ethoxy-	28
6188	-----, N,N-dibutyl-o-ethoxy-	85
6216	-----, N,N-dibutyl-p-ethoxy-	83
6207	-----, N,N-dicyclohexyl-o-ethoxy-	83
7140	-----, o-ethoxy-	80
6213	-----, p-ethoxy-N,N-diethyl-	63
4798	-----, 2-ethoxy-x,x-diethyl-	74
6192	-----, o-ethoxy-N,N-diisopropyl-	51
6210	-----, p-ethoxy-N,N-dimethyl-	60
6222	-----, p-ethoxy-N,N-dipentyl-	77
6187	-----, o-ethoxy-N,N-dipropyl-	82
6214	-----, p-ethoxy-N,N-dipropyl-	79
6191	-----, o-ethoxy-N-isobutyl-	88
6217	-----, p-ethoxy-N-isobutyl-	61
6195	-----, o-ethoxy-N-isopropyl-	58
6211	-----, p-ethoxy-N-methyl-	30
6221	-----, p-ethoxy-N-pentyl-	51
6190	-----, o-ethoxy-N-propyl-	90
6212	-----, p-ethoxy-N-propyl-	55

TABLE I

Code No.	Classification and Name	K Value
	AMIDES	
	Monosubstituted	
	Ethers	
6205	Benzanilide, N-butyl-2-ethoxy-	88
6206	-----, 2-ethoxy-N-ethyl-	39
6204	-----, 2-ethoxy-N-methyl-	28
5006	o-Benzanisidide, 4-methoxy-	38
5001	m-Benzotoluidide, 4-methoxy-	71
5002	o-Benzotoluidide, 4-methoxy-	21
5003	p-Benzotoluidide, 4-methoxy-	27
5073	o-Butyranisidide	100
6155	p-Butyranisidide	64
6157	o-Butyrophenetidide	56
4758, 6156	p-Butyrophenetidide	58, 32
5426	Decanediamide, N,N-bis(3,4-dimethoxyphenyl)-	42
6183	p-Formanisidide	52
6184	o-Formophenetidide	59
5961	Phthalamide, N,N'-bis(p-methoxyphenyl)-	81
4991	Piperidine, 1-(p-anisoyl)-	94
	Halides	
6090	Acetamide, N-allyl-2-chloro-	87
7041	-----, 2-bromo-N-sec-butyl-	99
7178	-----, 2-bromo-N-cyclohexyl-	99
5819	-----, N-tert-butyl-, hydrogeniodide, compound with ½ f. wt. iodine	70
3485	-----, 2-chloro-	21
4930	-----, 2-chloro-N-hexadecyl-	72
6132	Acetanilide, 2'-acetamido-4'-chloro-	75
7063	-----, 2'-bromo-	66
3099	-----, 2-chloro-	89
7049	-----, 2'-chloro-	94
7064	-----, 4'-chloro-	87
7051	-----, 2,2-dichloro-	94
5048	-----, 2',5'-dichloro-	71
5049	-----, 2',5'-dichlorodi-	76
6020	-----, 4'-iodo-	80
7053	-----, 2,2,2-trichloro-	96
7181	Aceto-o-toluidide, 2-bromo-	92
5326	Acrylamide, N-(m-chlorophenyl)-	67
5842	-----, 2,3-dichloro-N-(m-chlorophenyl)-	95
4778	Benzamide, N-benzyl-o-chloro-	89
4779	-----, N-benzyl-p-chloro-	34
4437	-----, N-benzyl-2,4-dichloro-	48
4443	-----, N-sec-butyl-o-chloro-	93
4775	-----, o-chloro-N-cyclohexyl-	80
4776	-----, p-chloro-N-cyclohexyl-	80

TABLE I

Code No.	Classification and Name	K Value
	AMIDES	
	Monosubstituted	
	Halides	
4781	Benzamide, p-chloro-N,N-dipropyl-	98
4454	-----, p-chloro-N-(1-methylpentyl)-	95
4444	-----, o-chloro-N-pentyl-	89
4780	-----, p-chloro-N-2(or 3?)-pentyl-	90
4436	-----, 2,4-dichloro-N-cyclohexyl-	71
4902	-----, 2,4-dichloro-N-isobutyl-	85
4919	-----, 2,4-dichloro-N-(1-methylbutyl)-	87
4459	-----, 2,4-dichloro-N-pentyl-	90
4445	Benzanilide, 4'-bromo-2-chloro-	85
4456	-----, 2'-bromo-2,4-dichloro-	35
4429	-----, 4'-bromo-2,4-dichloro-	58
4430	-----, 4'-bromo-3,4-dichloro-	41
6428	-----, 2'-chloro-	35
6429	-----, 3'-chloro-	12
4449	-----, 4-chloro-	52
6430	-----, 4'-chloro-	6
4447	-----, 2,2'-dichloro-	75
4448	-----, 2,3'-dichloro-	59
4457	-----, 2,4'-dichloro-	98
4773	-----, 2',4-dichloro-	14
6431	-----, 2',5'-dichloro-	14
4774	-----, 3',4-dichloro-	3
4458	-----, 2,4-dichloro-2'-phenyl-	38
4428	-----, 2,2',4,5'-tetrachloro-	33
4455	-----, 2',3,4,5'-tetrachloro-	30
4905	-----, 2,2',4-trichloro-	32
4906	-----, 2,3',4-trichloro-	36
4432	-----, 2',3,4-trichloro-	17
4907	-----, 2,4,4'-trichloro-	28
4433	-----, 2,4,5'-trichloro-	35
4434	-----, 3,3',4-trichloro-	72
4450	m-Benzotoluidide, 2-chloro-	64
4451	o-Benzotoluidide, 2-chloro-	72
4452	p-Benzotoluidide, 2-chloro-	90
4440	o-Benzotoluidide, 4-chloro-	57
4441	p-Benzotoluidide, 4-chloro-	40
4908	m-Benzotoluidide, 2,4-dichloro-	13
4910	p-Benzotoluidide, 2,4-dichloro-	26
4909	m-Benzotoluidide, 3,4-dichloro-	36

TABLE I

Code No.	Classification and Name	K Value
	AMIDES	
	Monosubstituted	
	Halides	
6153	Butyranilide, 4'-bromo-	67
5066	-----, 2'-chloro-	63
5065	-----, 3'-chloro-	95
5067	-----, 4'-chloro-	90
5441	-----, 3'-chloro-perfluoro-	65
5847	-----, 3'-chloro-2,2,3-trichloro-	73
5070	-----, 2',5'-dichloro-	61
6178	Formanilide, 2'-chloro-	53
6180	-----, 3'-chloro-	41
6181	-----, 4'-chloro-	95
5763	-----, 2',4'-dichloro-	76
6182	-----, 2',5'-dichloro-	55
5848	Isobutyranilide, 3'-chloro-	67
5748	-----, 4'-chloro-	(T)
5758	-----, 2',4'-dichloro-	61
7126	Oxanilide, 3,3'-dichloro-	32
5963	Phthalamide, N,N'-bis(o-chlorophenyl)-	95
6689	Propionamide, 3-chloro-N-methyl-	67
7179	Propionanilide, 2'-bromo-	96
6106	-----, 4'-bromo-	85
5054	-----, 2'-chloro-	63
3100, 5055	-----, 3'-chloro-	77, 62
5053	-----, 4'-chloro-	92
4686, 5056	-----, 2',5'-dichloro-	47, 58
6110	o-Propionotoluidide, 5'-chloro-	57
	Heterocyclic Compounds	
3503	Acetamide, N-cyclohexyl-N-tetrahydrofurfur-2-yl-	78
6543	-----, N-[2-(2-heptadecyl-2-imidazolin-1-yl)ethyl]-, acetate	57
3454	Acetanilide, N-2-benzothiazolyl-	35
5857	Benzamide, 3,4-methylenedioxy-N,N-dipentyl-	94
5856	-----, 3,4-methylenedioxy-N,N-dipropyl-	97
5328	Decanediamide, N,N'-diethylene-	-12
4974, 6835		85, 60
7062	2-Furamide	85
3259	2-Furanilide	87
6099	Hexahydro-vic-triazine, 1,2,3-triacrylyl-	97
4805	Morpholine, 4-butyryl-	83
4807	-----, 4-hexanoyl-	88
3714	-----, 4-(phenylacetyl)-	55
3424	Nicotinamide, N-cyclohexyl-	51

TABLE I

Code No.	Classification and Name	K Value
	AMIDES	
	Monosubstituted	
	Heterocyclic Compounds	
6126	2-Picoline, 6-acetamido-	85
6504	-----, 6-benzamido-	97
6127	3-Picoline, 2-acetamido-	84
6507	-----, 2-benzamido-	98
6128	4-Picoline, 2-acetamido-	65
6692	Piperazine, 1-acetyl-4-dodecyl-	79
6693	-----, 1,4-dilauroyl-	43
3266	Piperidine, 1-benzoyl-3-[4-(N-methylbenzamido)butyl]-	89
6125	Pyridine, 2-acetamido-	96
3974	Thiazole, 2-acetamido-4,5-bis(acetoxymercuri)-	95
5127*	-----, 2-acetamido-4-methyl-	96
5119	-----, 2-acetamido-5-methyl-	96
4328	s-Triazine, 2,4-diacetamido-6-phenyl-	29
	Hydrazides	
6097	Oxamic acid, allyl-, 2,2-dimethylhydrazide	92
5770	-----, phenylhydrazide	99
5514	Phenaceturic acid, hydrazide	97
	Imides	
4827	Acrylamide, N-(phthalimidomethyl)-	61
6741	Maleimide, N-tert-butylcarbamoyl-	85
6740	-----, N-carbamoyl-	87
4817	Phthalimide, 4-acetamido-	56
7099	Succinimide, N-carbamoyl-	42
	Imines	
5029	Acetamide, N-(9-phenyliminofluoren-2-yl)-	63
5031	p-Acetotoluidide, α-(2-fluorenylimino)-	40
	Iodonium Compounds	
	Iodonium compounds.	
3429	bis(acetamidophenyl)----- chloride	(T)
3546	bis(lauramidophenyl)----- iodide	20
	Ketones	
5416	Acetamide, N-(9-oxo-2-fluorenyl)-	93
4241	-----, 2-phenyl-N-(α-phenylphenacyl)-	48
4840*, 6130	Acetanilide, 3'-acetyl-	91, 71
6120	-----, 4'-acetyl-	76
6105	-----, 4'-benzoyl-	82

TABLE I

Code No.	Classification and Name	K Value
	AMIDES	
	Monosubstituted	
	Ketones	
5342	Acetoacetamide, N,N'-ethylenebis-	-25
5348	-----, N,N'-(4-methylphenylene)bis-	88
4014	Acetoacetanilide	28
5926	-----, 4',4"-methylenebis-	78
5953A	-----, 2'-phenyl-	60
5422	Benzamide, N-(9-oxo-2-fluorenyl)-	-54
4240	-----, N-(α-phenylphenacyl)-	-173
3611	Isatin, 1-acetyl-	17
3196	Levulinamide, N,N-diethyl-	62
6108	Propionanilide, 4'-acetyl-	85
6115	-----, 4'-benzoyl-	65
	Nitriles	
4858, 5563	Acetamide, 2-cyano-	32, 9
5519	-----, N-cyanomethyl-2,2-diphenyl-	90
6765	Acrylamide, 3-cyano-	96
3778, 4853	Quinaldonitrile, 1-benzoyl-1,2-dihydro-	47, 64
	Nitro Compounds	
5059	Acetanilide, 2',4'-dinitro-	100
6016	-----, N-methyl-4'-nitro-	57
5047	-----, 3'-nitro-	86
4403	Benzamide, N-benzyl-p-nitro-	95
4658	-----, N-butyl-p-nitro-	78
4659	-----, N-sec-butyl-p-nitro-	94
4400	-----, N-cyclohexyl-m-nitro-	74
4668	-----, N,N-dibenzyl-p-nitro-	-2
4390	-----, N,N-diethyl-p-nitro-	91
4666	-----, N,N-diisobutyl-p-nitro-	90
4401	-----, N,N-diisopropyl-m-nitro-	91
4394	-----, N,N-diisopropyl-p-nitro-	85
4398	-----, N-isobutyl-m-nitro-	86
4660	-----, N-isobutyl-p-nitro-	84
4392	-----, N-isopropyl-p-nitro-	87
4393	-----, N-methyl-p-nitro-	92
4395	-----, p-nitro-N,N-dipropyl-	90
4663	-----, p-nitro-N-pentyl-	89
3715	-----, N-(p-nitrophenethyl)-	71
4391	-----, p-nitro-N-propyl-	92
6437	Benzanilide, 2',4'-dinitro-	93
6434	-----, 2'-nitro-	67
6435	-----, 3'-nitro-	-31
6436	-----, 4'-nitro-	4

TABLE I

Code No.	Classification and Name	K Value
	AMIDES	
	Monosubstituted	
	Nitro Compounds	
6186	Butyranilide, 2'-nitro-	41
5068	-----, 3'-nitro-	99
5069	-----, 4'-nitro-	98
5962	Phthalamide, N,N'-bis(o-nitrophenyl)-	47
5967	-----, N,N'-dicyclohexyl-, 3-nitro-	37
5969	-----, 3-nitro-, N,N'-dipentyl-	47
5971	Phthalanilide, N,N'-dibutyl-3-nitro-	24
5970	-----, 3-nitro-N,N'-dipentyl-	31
4419, 6111	Propionanilide, 2',4'-dinitro-	97, 96
5058	-----, 2'-nitro-	94
5057	-----, 3'-nitro-	91
	Phenols	
7059	Acetamide, 2-salicylidene-	0
6011	Acetanilide, 4'-hydroxy-	7
2914	2-Anthranilide, 3-hydroxy-	11
4425	1-Naphthalenepropionamide, N-cyclohexyl-2-hydroxy-	35
4937	3-Naphthamide, N-cyclohexyl-2-hydroxy-	81
7052	Salicylamide	86
4465	copper(II) derivative	96
6490	-----, N-butyl-3-cyclohexyl-	50
7180	-----, N-cyclohexyl-	95
7182	-----, N-1-naphthyl-	41
5946	-----, 3-phenyl-	71
3388	Salicylanilide	50
3355	Salicylo-o-toluidide	52
	Thioureas	
5648	Acetamide, 2-[(2-imidazolin-2-yl)thio]-, picrate	96
5635	2-Pseudoureaacetamide, 2-thio-, hydrochloride	60
3484	2-Pseudoureapropionamide, 2-thio-, hydrochloride	40
	Miscellaneous	
5052	Acetamide, N-2-anthraquinonyl-	58
3706	Acetanilide, p-formyl-, thiosemicarbazone	37
6019	-----, 2-mercapto-	83
5670	-----, 4'-thiocyanato-	81
	Ammonium compounds.	
6401*	ethylenebis[(aminocarbonylmethyl)dimethyl[x-(1-methylheptyl)benzyl]----- chloride	89

TABLE I

Code No.	Classification and Name	K Value
	AMIDES	
	Monosubstituted	
	Miscellaneous	
3771	1,3-Benzoxazine, 1-acetyl-4-oxo-2-phenyl-	66
5336	Bisurea, N,N-sebacoyl-	-19
5173	Carbohydrazide, 1-carbamoyl-	54
5321	-----, 1-carbamoyl-3-thio-	21
5452	Disulfide, bis[(2-acetamidoethyl)aminothiocarbamoyl]	66
5130	4,4'-Ditolyl sulfone, 3,3'-diacetamido-	39
6690	Hexananilide, 4'-sulfamoyl-	59
7109	Octanamide, N,N'-ethylenebis[N-nitroso-	36
5456	2-Thiazolidinethione, 3-ethylcarbamoyl-	95
	Disubstituted	
	Acid-Halides	
3451	Caproic acid, ε-benzamido-α-bromo-	85
5485	Maleanilic acid, 3-chloro-	80
7094	Phthalamic acid, N-(3,4-dichlorophenyl)-	91
	Acid-Heterocyclic Compounds	
5880	7-Oxabicyclo[2.2.1]heptane-2-carboxylic acid, 3-(1-naphthylcarbamoyl)-	83
5944	-----, 3-(4H-1,2,4-triazol-3-ylcarbamoyl)-	58
	Acid-Nitro Compounds	
2759	L-Glutamic acid, N-(m-nitrobenzoyl)-	41
5531*	Phthalanilic acid, 2'-nitro-	95
5532	-----, 4'-nitro-	55
	Alcohol-Halides	
5129*	Acetamide, 2-chloro-N-dodecyl-N-(2-hydroxyethyl)-	95
7214	-----, 2-(p-chlorophenyl)-N-(2-hydroxyethyl)-	69
7144*	2-Propanol, 3-benzamido-1,1,1-trichloro-	94
	Amine-Ethers	
4940	Acetamide, 2-(6-methoxy-m-toluidino)-	74
4838*	p-Acetanisidide, 2'-amino-	97
	Amine-Halides	
4939	Acetamide, 2-(m-bromoanilino)-	95
4941	-----, 2-(m-chloroanilino)-	66

TABLE I

Code No.	Classification and Name	K Value
	AMIDES	
	Disubstituted	
	Amine-Heterocyclic Compounds	
2710	Phenothiazine, 10-benzoyl-3,7-bis(dimethylamino)-	-6
5701	s-Triazine, 4-[(2-acetamidoethyl)amino]-2,6-diamino-	43
5699	2-s-Triazineacetamide, 4,6-diamino-	42
	Azo-Halides	
4442	Benzanilide, 4-chloro-4'-phenylazo-	25
4689	-----, 2,4-dichloro-4'-phenylazo-	16
	Ester-Halides	
4414	Oxanilic acid, 4'-chloro-, ethyl ester	73
5931	-----, 3'-chloro-, isopropyl ester	35
	Ester-Nitriles	
5335	Acrylic acid, 3-(p-acetamidophenyl)-2-cyano-, ethyl ester	-15
5515	Phenaceturic acid, α-cyano-, ethyl ester	59
	Ether-Halides	
3576	Acetamide, 2-(2,4-dichlorophenoxy)-	89
4912	Acetanilide, 3'-chloro-2-(pentachlorophenoxy)-	18
6131	o-Acetanisidide, 5'-chloro-	53
5039	p-Anisanilide, 4'-bromo-	50
4783, 4992	-----, 2'-chloro-	70, 21
4784, 4993	-----, 3'-chloro-	55, 53
4785, 4994	-----, 4'-chloro-	35, 59
4782, 4995	-----, 2',5'-dichloro-	-31, 51
6200	Benzanilide, 2'-bromo-2-ethoxy-	2
6201	-----, 4'-bromo-2-ethoxy-	-8
6197	-----, 2'-chloro-2-ethoxy-	-38
6198	-----, 3'-chloro-2-ethoxy-	-44
6199	-----, 4'-chloro-2-ethoxy-	-185
6202	-----, 2',5'-dichloro-2-ethoxy-	72
4438	o-Benzanisidide, 2,4-dichloro-	33
4453	p-Benzanisidide, 2-chloro-	82
4439	-----, 2,4-dichloro-	54
4911	-----, 3,4-dichloro-	15
	Ether-Nitro Compounds	
4762, 4996	p-Anisanilide, 2'-nitro-	92, 89
4998	-----, 4'-nitro-	64
5972	Phthalamide, N,N'-bis(p-methoxyphenyl)-3-nitro-	44

TABLE I

Code No.	Classification and Name	K Value
	AMIDES	
	Disubstituted	
	Ether-Phenols	
5943	m-Anisamide, 6-hydroxy-N-methyl-	27
6253	Salicylo-p-phenetidide	25
	Halide-Ketones	
2922	Acetoacetanilide, 4'-chloro-	71
5749	-----, 4,4,4-trifluoro-	64
	Halide-Nitro Compounds	
4771	Benzanilide, 2-chloro-3'-nitro-	49
4772	-----, 2-chloro-4'-nitro-	46
4415	-----, 3'-chloro-3-nitro-	56
4446	-----, 4-chloro-2'-nitro-	64
4435	-----, 4-chloro-3'-nitro-	42
4747	-----, 4-chloro-4'-nitro-	56
4680	-----, 4'-chloro-4-nitro-	45
4431	-----, 2,4-dichloro-2'-nitro-	53
4904	-----, 2,4-dichloro-3'-nitro-	23
5769	Formanilide, 2'-chloro-4'-nitro-	96
	Halide-Phenols	
6501	Salicylamide, N-allyl-5-chloro-	99
6720	-----, N-benzyl-5-chloro-	83
6484	-----, 5-bromo-N,N-dimethyl-3-phenyl-	5
6506	-----, N-butyl-5-chloro-	99
6508	-----, N-sec-butyl-5-chloro-	98
6535, 6714	-----, N-tert-butyl-5-chloro-	99, 95
6534, 6713	-----, 5-chloro-	97, 95
6505	-----, 5-chloro-N-ethyl-	91
6717	-----, 5-chloro-N-heptyl-	96
6716	-----, 5-chloro-N-hexyl-	94
6503	-----, 5-chloro-N-isobutyl-	99
6502	-----, 5-chloro-N-isopropyl-	98
6500	-----, 5-chloro-N-methyl-	97
6718	-----, 5-chloro-N-octyl-	90
6715	-----, 5-chloro-N-pentyl-	93
6509	-----, 5-chloro-N-propyl-	98
6722	Salicylanilide, 5-chloro-	73
6780	-----, 4',5-dibromo-	75
6723	-----, 2',5-dichloro-	82
6724	-----, 3',5-dichloro-	92
6725	-----, 4',5-dichloro-	88
6726	-----, 2',5,5'-trichloro-	88

TABLE I

Code No.	Classification and Name	K Value
	AMIDES	
	Disubstituted	
	Halide-Phenols	
6731	Salicylo-m-toluidide, 5-chloro-	79
6730	Salicylo-o-toluidide, 5-chloro-	89
6732	Salicylo-p-toluidide, 5-chloro-	72
	Heterocyclic-Nitro Compounds	
2798	2-Furamide, 5-nitro-	95
4397	Morpholine, 4-(m-nitrobenzoyl)-	96
5132	Thiazole, 2-acetamido-4-methyl-5-nitro-	96
	Miscellaneous	
5147	Acetamide, N-butyl-2-(pentachlorophenylthio)-	51
5015	-----, N-(cyanoamidino)-	67
4115	-----, 2-(2-hydroxyethoxy)-	28
3644	Acetanilide, 4'-sulfamoylthiazol-2-yl-	-35
5040	-----, 2,2,2-trichloro-4'-sulfamoyl-	91
6648	p-Acetanisidide, 2'-acetyl-	87
7263	Acetic acid, [o-(N-allylcarbamoyl)phenoxy]-	-14
3274	Anthraquinone, 1-benzamido-4-chloro-	7
3977	Benzaldehyde, p-acetamido-, (2-benzothiazolyl)-hydrazone	-15
4178	Benzamide, N-homopiperonyl-3,4,5-trimethoxy-	45
4986, 5126	-----, N-(2-hydroxyethyl)-p-nitro-	77, 92
3774	1,3-Benzoxazine, 1-acetyl-2-trichloromethyl-4-oxo-	-50
7047	Butyraldehyde, α,α,β-trichloro-, and propionamide	95
5754	Butyric acid, 4-(2-formamidoethylsulfonyl)-	27
6760	Fumaramic acid, N-formyl-	64
3805	2-Furanacrylamide, α-cyano-	71
2860	D-Glucoanilide, p-sulfamoyl-	-21
3123	Iodonium compounds. bis(acetoacetamidophenyl)----- iodide	83
4544	Isonicotinamide, N-(3-guanylguanidino)-	90
5832	Maleimide, N-(2-acetamidoethyl)-2,3-dichloro-	95
5516	Malonic acid, (2-phenylacetamido)-, monoethyl ester, sodium salt	45
6315	Phthalanilic acid, 4'-(acetylsulfamoyl)-, dihydrate	21
5269	Phthalimide, N-[p-(methylcarbamoyl)anilinomethyl]-	74
6046	1,4-Phthalazinedione, 2,3-dihydro-5-(p-nitrobenzamido)-	-2
7213	Quinoline, 5-acetamido-8-thioacetyl-	60
6470	Salicylamide, N-butyl-3-cyclohexyl-5-nitro-	51
7110	Semicarbazide, 1-(p-chlorobenzoyl)-	18

TABLE I

Code No.	Classification and Name	K Value
	AMIDES	
	Disubstituted	
	Miscellaneous	
6762	Succinimide, α-acetoxythio-N-carbamoyl-x-pentyl-	64
5004	Thiazole, 2-(2,2,2-trichloroacetamido)-	64
5521	Valine, N-acetyl-3-mercapto-	34
	Polysubstituted	
4469	Ethanol, 2,2,2-trichloro-1-salicylamido-	80
2800	2-Naphthamide, 1,2,3,4-tetrahydro-6-hydroxy-4-(4-hydroxy-3-methoxyphenyl)-3-hydroxymethyl-7-methoxy-, from α-conidendrin	18
6638	Nicotinanilide, 4'-sulfanilyl-	64
6719	Salicylamide, 5-chloro-N-(2-hydroxyethyl)-	84
6721	-----, 5-chloro-N-(3-hydroxypropyl)-	94
6727	Salicylanilide, 5-chloro-2'-nitro-	95
6728	-----, 5-chloro-3'-nitro-	97
6729	-----, 5-chloro-4'-nitro-	99
6639	Succinanilic acid, 4'-[p-(2,5-dimethyl-1-pyrrolyl)phenylsulfonyl]-	53
	AMIDINES	
	Substituted	
5881	Benzamidine, p-chloro-, hydrochloride	87
6635	-----, p-(methylsulfonyl)-, monohydrochloride	63
6623	Benzoic acid, p-amidino-, ethyl ester hydrochloride	79
4544	Isonicotinamide, N-(3-guanylguanidino)-	90
2981	Urea, amidino-, monosulfate	82
	AMINES	
	Unsubstituted	
	Primary	
3589	Abietylamine, compound with 1/3 f. wt. boron trifluoride	65
3587	Allylamine, compound with 1 f. wt. boron trifluoride	95

TABLE I

Code No.	Classification and Name	K Value
	AMINES	
	Unsubstituted	
	Primary	
4796	Aniline, x-butyl-	96
3146	compound with 1 f. wt. boron trifluoride	44
3727	compound with 1 f. wt. x,x,x-trinitrostilbene	64
4797	-----, x,x-dibutyl-	82
7299*	-----, 4,4'-methylenebis-	83
2708	salt with 1 f. wt. fluosilicic acid	91
6037	Bicyclo[3.3.1]hept-3-en-2-amine, d-2,6,6-trimethyl-	97
5253*	-----, l-4,6,6-trimethyl-	98
3742, 6065	[Bicyclohexyl]-2-amine	90, 94
3043	2-Biphenylamine	93
4019	4-Biphenylamine	99
2719	Butylamine, salt with 1 f. wt. fluosilicic acid	90
6806	1,2-Cyclohexanediamine	62
3463	Cyclohexylamine, hydrogen phosphate	98
6803*	-----, 4-nonyl-	98
2720	salt with 1 f. wt. fluosilicic acid	91
6461	salt with O-butyl-S-carboxymethyl xanthate	73
3359	1,10-Decanediamine	89
3035, 4253	Dodecylamine	86, 98
3147	compound with 1 f. wt. boron trifluoride	67
3148	compound with 1/2 f. wt. boron trifluoride	90
3149	compound with 1/3 f. wt. boron trifluoride	96
3595	compound with 1/4 f. wt. germanium tetrachloride	98
5131	p-toluenesulfonate	87
3532	Hexadecylamine	98
3150	compound with 1 f. wt. boron trifluoride	67
3151	compound with 1/2 f. wt. boron trifluoride	97
3152	compound with 1/3 f. wt. boron trifluoride	96
2714	1,6-Hexanediamine, salt with 1 f. wt. fluosilicic acid	66
3919	Hexylamine, 1-methyl-	93
2712	Isopropylamine, salt with 1 f. wt. fluosilicic acid	88
3951	Methylamine, salt with 4,6-dinitro-o-cresol	98
2711	salt with 1 f. wt. fluosilicic acid	92
4092	Naphthenylamine	99
4093	acetate	84
4094	hydrochloride	81
4095	picrate	92
4259*	Octadecylamine	96
3156	compound with 1 f. wt. boron trifluoride	92
3157	compound with 1/2 f. wt. boron trifluoride	91
2718	salt with 1 f. wt. fluosilicic acid	76

TABLE I

Code No.	Classification and Name	K Value
	AMINES	
	Unsubstituted	
	Primary	
3145	Octylamine, compound with 1 f. wt. boron trifluoride	76
2706	salt with 1 f. wt. fluosilicic acid	87
2723	1-Phenanthrenemethylamine, salt with 1 f. wt. fluosilicic acid	91
2724, 3873	m-Phenylenediamine, compound with 1 f. wt. 1,3,5-trinitrobenzene	96, 95
3588	Propylamine, compound with 1 f. wt. boron trifluoride	55
3581	Rosin amine D, salt with 1 f. wt. 2-sec-butyl-4,6-dinitrophenol	100
3059	salt with 1 f. wt. fluosilicic acid	88
4536	Tetradecylamine	95
5153	compound with 1/4 f. wt. boron trichloride	100
3153	compound with 1 f. wt. boron trifluoride	41
3154	compound with 1/2 f. wt. boron trifluoride	98
3155	compound with 1/3 f. wt. boron trifluoride	79
4692	compound with 1 f. wt. 1,3,5-trinitrobenzene	94
2709	o-Toluidine, salt with 1 f. wt. fluosilicic acid	94
3720	p-Toluidine, α,α,α-triphenyl-	-3
2918	2,5-Xylidine, 4,4'-methylenebis-	-21
	Secondary	
7187	Aniline, N-allyl-	95
5952	-----, N-butyl-, hydrochloride	92
5953	-----, N-isopentyl-, hydrochloride	89
4901	Benzidine, N,N'-di-sec-butyl-	86
3650	-----, N,N'-di(2-naphthyl)-	43
3486	Benzylamine, N-cyclohexyl-	87
3487	-----, N-(2-methylcyclohexyl)-	82
6455*	2-Butyne-1,4-diamine, N,N'-bis(1,1,3,3-tetramethylbutyl)-	95
3498	Cyclohexylamine, N-allyl-	95
3490	-----, N-ethyl-	80
3497	-----, N-isopropyl-	90
3488	-----, N-methyl-	73
3495	-----, 2-methyl-N-propyl-	93
3493	-----, N-pentyl-	96
3496	-----, N-phenyl-	90
3491	-----, N-propyl-	90
6452*	Dibutylamine, 1-ethynyl-	91
2707	salt with 1 f. wt. fluosilicic acid	84
3465	Dicyclohexylamine, dihydrogen phosphate	93
3144	Diethylamine, compound with 1 f. wt. boron trifluoride	45
7256	Dimethylamine, compound with diborane	92

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Code No.	Classification and Name	K Value
	AMINES	
	Unsubstituted	
	Secondary	
3171	Dodecylamine, N-phenethyl-	99
4836, 5988	Ethylenediamine, N,N'-dibenzyl-	88, 81
3524	-----, N,N'-di(loralkyl)-	54
2722	Nonylamine, salt with 1 f. wt. fluosilicic acid	95
3173	Phenethylamine, N-cyclohexyl-	96
3172	-----, N-hexyl-	98
7280*	p-Phenylenediamine, N-cyclohexyl-N'-phenyl-	78
3019, 7284	-----, N,N'-diphenyl-	46, 15
5954	p-Toluidine, hydrochloride	97
	Tertiary	
4311	Aniline, 4,4'-benzylidenebis[N,N-dimethyl-	88
4185	-----, 4,4'-heptylidenebis[N,N-dimethyl-	26
4310	-----, 4,4'-(p-methylbenzylidene)bis[N,N-dimethyl-	91
6547	-----, N,N'-methylenebis[N-ethyl-	73
4184	-----, 4,4',4"-methylidynetris[N,N-dimethyl-	-5
2705	Benzidine, N,N,N',N'-tetraethyl-	-9
3517	Benzylamine, N-cyclohexyl-N-isopropyl-	90
3515	-----, N-cyclohexyl-N-methyl-	84
3020	-----, N-cyclohexyl-N-pentyl-	90
3509	-----, N-cyclohexyl-N-phenyl-	53
2713	-----, N,N-dimethyl-, salt with 1 f. wt. fluosilicic acid	80
4021	-----, N-ethyl-N-phenyl-	95
6038	Bicyclo[3.3.1]hept-3-en-2-amine, 1-cis-N,N,4,6,6-pentamethyl-	87
6042	-----, 1-N,N,2,6,6-pentamethyl-	81
6039	-----, d-trans-N,N,4,6,6-pentamethyl-	91
6769	2,2'-Biphenyldiamine, N,N,N',N'-tetramethyl-	96
5428	2-Butene-1,4-diamine, N,N,N',N'-tetramethyl-	87
6288	Cyverine, hydrochloride	93
3507	Dibenzylamine, N-cyclohexyl-	80
3494	Dicyclohexylamine, N-methyl-	88
3522	Dodecylamine, N,N-dibutyl-	71
4066	-----, N,N-dimethyl-	97
3531	Ethylenediamine, N,N,N',N'-tetrahexyl-	60
6453	2-Heptyne-1,4-diamine, N,N,N',N'-tetramethyl-	96
3538	Loralkylamine, N-cyclohexyl-N-pentyl-	93
3032	Methanediamine, N,N,N',N'-tetrabutyl-	94
4255	Octadecylamine, N,N-dimethyl-	86
4254	Oleylamine, N,N-dimethyl-	93
6458*	6,9-Tetradecanediamine, N,N,N',N',2,2,4,11,13,13-decamethyl-	95

TABLE I

Code No.	Classification and Name	K Value
	AMINES	
	Unsubstituted	
	Tertiary	
6457*	7-Tetradecyne-6,9-diamine, N,N,N',N',2,2,-4,11,13,13-decamethyl-	94
7255	Trimethylamine, compound with diborane	2
3269	Trioctylamine	77
3331	Tripentylamine, compound with 1 f. wt. boron trifluoride	95
6382	m-Xylene-α,α'-diamine, N,N,N',N'-tetraethyl-2,4,6-trimethyl-	88
	Mixed	
6454	2-Butyne-1,4-diamine, N,N-dimethyl-N'-(1,1,3,3-tetramethylbutyl)-	94
3024	Diethylenetriamine, 1(or 4?)-alkyl-	89
3518	-----, 1(?)-dodecyl-	87
3521	crude	93
3519	-----, 1(?)-tetradecyl-	95
3520	Ethylenediamine, N-loralkyl-	78
7289*	p-Phenylenediamine, N-phenyl-	76
	Monosubstituted	
	Acids	
4495	Acetic acid, p-aminophenylmercury(II) salt	100
3348	-----, (ethylenediamine)tetra-, disodium salt, dihydrate	-34
3349	trisodium salt, monohydrate	-115
5753	-----, 1-phenyliminodi-	55
3093	Anthranilic acid, nickel(II) salt	26
3516	Glycine, N-cyclohexyl-	47
4839	2-Naphthoic acid, 3-amino-, hydrochloride	81
3264	Octanoic acid, 2-amino-	47
	Alcohols	
6475	5-Acenaphthenemethanol, α-(dipropylaminomethyl)-	92
6624	x-Apocupreineethanol, dihydrochloride	97
2888	Benzhydrol, 4,4'-bis(dimethylamino)-	81
3609	1-Butanol, 2-amino-	47
5154	2-Butanol, 4-tetradecylamino-	88
5155	salt with 1 f. wt. propionic acid	85
3158	Dodecylamine, N,N-bis(2-hydroxyethyl)-, compound with 1 f. wt. boron trifluoride	73
3159	compound with 1/2 f. wt. boron trifluoride	93
3160	compound with 1/3 f. wt. boron trifluoride	82

TABLE I

Code No.	Classification and Name	K Value
	AMINES	
	Monosubstituted	
	Alcohols	
2704	Ethanol, 2,2'-aminobis-, salt with 1 f. wt. fluosilicic acid	74
7258	-----, 2-(2-aminoethylamino)-, dihydrochloride	1
4800	-----, 2-[o(and p)-aminophenyl]-, hydrochloride	31
4812*	-----, 2-(N-butylanilino)-	92
5128	-----, 2-(2-methyl-1-naphthylamino)-	98
5332	-----, 2,2'-(2,5-xylidino)bis-	47
6445*	4-Heptanol, 1-dimethylamino-5-ethyl-	86
6663	1-Naphthalenemethanol, α-(3-diheptylaminopropyl)-	91
6539	-----, α-(2-dipentylaminoethyl)-, hydrochloride	95
6650	-----, α-(1-dipropylaminoethyl)-, hydrochloride	91
6447	4-Nonanol, 1-dimethylamino-6,8,8-trimethyl-	86
3164	Octylamine, N,N-bis(2-hydroxyethyl)-, compound with 1/3 f. wt. boron trifluoride	73
6469	9-Phenanthrenemethanol, α-(diisopentylamino-methyl)-1,2,3,4-tetrahydro-, hydrochloride	92
3296	Phenethyl alcohol, p-amino-	31
6366	1,3-Propanediol, 2-amino-2-methyl, salt with 1 f. wt. neoabietic acid	62
6088	1,2-Propanediol, 3-(N-allylanilino)-	70
4820	-----, 3,3'-(1-naphthylamino)bis-	38
2715	2-Propanol, 2,2'-aminobis-, salt with 1 f. wt. fluosilicic acid	85
4819	-----, 1,1'-anilinobis-	51
6060	-----, 1,3-bis(dimethylamino)-, dihydrochloride	56
2856	-----, 1-cyclohexylamino-	75
6629	3-Retenemethanol, α-(1-dibutylaminoethyl)-, hydrochloride	98
6630	-----, α-(1-dihexylaminoethyl)-, hydrochloride	77
6537	-----, α-(diisohexylaminomethyl)-, hydrochloride	65
3161	Tetradecylamine, N,N-bis(2-hydroxyethyl)-, compound with 1 f. wt. boron trifluoride	78
3162	compound with 1/2 f. wt. boron trifluoride	90
3163	compound with 1/3 f. wt. boron trifluoride	85
	Amides	
4804	Acetamide, 2-cyclohexylamino-	89
6122	Acetanilide, 4'-dimethylamino-	89
4837	-----, 4'-isobutylamino-	100
2913	2',4'-Benzoxylidide, 5'-amino-	94
3130	Crotonanilide, N-sec-butyl-4'-(sec-butylamino)-	75
5109	Oleamide, N-(3-diethylaminopropyl)-	87
4810	Sebacamide, N,N'-bis(2-aminoethyl)-	59

TABLE I

Code No.	Classification and Name	K Value
	AMINES	
	Monosubstituted	
	Azo Compounds	
6028	Aniline, 3,3'-azoxydi-	-52
4411	o-Toluidine, 4-(o-tolylazo)-	91
	Carbamates	
5461	Carbanilic acid, 2-amino-, isopropyl ester	76
5468	-----, 2-(diethylamino)ethyl ester	93
6251	-----, 1-(dimethylamino)prop-2-yl ester	59
	Esters	
3857	p-Aminobenzoic acid, butyl ester	46
3387	Anthranilic acid, methyl ester	49
5752	Crotonic acid, 3-(methylamino)-, allyl ester	71
5167	Methacrylic acid, 2-(diethylamino)ethyl ester	77
3268	Oxalic acid, ester with p-(dimethylamino)phenol	71
	Ethers	
4545	Allylamine, 2(or 3)-allyloxy-N,N-dimethyl-	83
6227	Aniline, 2,5-dimethoxy-	89
4564	-----, p-hexyloxy-, benzenesulfonate	97
4183	-----, 4,4'-(p-methoxy)benzylidenebis[N,N-dimethyl-	83
3574	-----, 4,4'-oxydi-	32
3575	-----, N-(2-phenoxyethyl)-	66
5955	o-Anisidine, hydrochloride	71
4237	Benzidine, 3,3'-dimethoxy-	96
3444	Benzylamine, N-(2,5-dimethoxyphenyl)-	1
7270	Bis(p-methoxyphenethyl)amine, phosphate	64
3094	Butylamine, 4-phenoxy-	87
4893	Dibenzylamine, N-[2-(x,x-diisopropyl-m-tolyloxy)-ethyl]-	75
4894	-----, N-[2-(x,x-diisopropyl-o-tolyloxy)ethyl]-	62
6062	Dodecylamine, N-(p-methoxybenzyl)-, hydrochloride	83
7160*	Ethane, 1,2-bis[p-[(hexylmethylamino)methyl]-phenoxy]-, dihydrochloride	96
7196*	Hexane, 1,6-bis[p-[(isopropylamino)methyl]phenoxy]-, dihydrochloride, 1 percent	100
7158	Propane, 1,3-bis[4-[(methylphenethylamino)methyl]-phenoxy]-, dihydrochloride	99
	Halides	
4808	Aniline, N-allyl-o-chloro-	80
2916	-----, 3,5-bis(trifluoromethyl)-	60
5861	-----, m-chloro-	96

TABLE I

Code No.	Classification and Name	K Value
	AMINES	
	Monosubstituted	
	Halides	
4312	Aniline, 4,4'-(p-chlorobenzylidene)bis[N,N-dimethyl-	97
4233	-----, 2,4,6-tribromo-	89
4243	Benzidine, 3,3'-dichloro-, dihydrochloride	93
6290	1,3-Butanediamine, N^3-(p-chlorophenyl)-N^1-isopropyl-, monohydrobromide	95
6513	Dibenzylamine, 4-bromo-N-cyclohexyl-	57
3128	Ethylamine, 2-bromo-, hydrochloride	100
3982	Hexylamine, 6-bromo-N,N-diethyl-, hydrochloride	41
4745	2,4-Xylidine, α^4-(o-chlorophenyl)-N-ethyl-α^4-(4-ethylamino-3-methyl-2,5-cyclohexadienyl-idene)-, monohydrochloride	100
	Heterocyclic Compounds	
6480	Antazoline, salt with methanesulfonic acid	74
4182	Bis(homopiperonyl)amine, hydrochloride	96
6831	Furfurylamine	94
6832	-----, tetrahydro-	74
5190	Guanazole, salt with 1/2 f. wt. oxalic acid	70
5152	Imidazoline, 1-(2-aminoethyl)-2-heptadecyl-	96
6238	Isoquinoline, 8-[[3-(diethylamino)propyl]amino]-, dihydrochloride	96
6289	-----, 1-[[3-(dihexylamino)propyl]amino]-,dihydrochloride	91
4738	Melamine, N^2,N^2-bis(2-methylallyl)-	83
4485*	-----, N^2,N^2-dimethyl-	95
4733	-----, N^2-phenyl-	54
3422	Metanicotine	91
6236	2-Picoline, 6-amino-	93
6712	hydrochloride	91
6235	3-Picoline, 2-amino-	97
6237	4-Picoline, 2-amino-	100
6791	Piperazine, 1-(2-aminoethyl)-	24
6314	Piperidine, 3-[(diphenylmethyl)amino]-1-methyl-, dihydrochloride	96
5251	Purine, 2,6-bis(diethylamino)-	96
7114	Pyridine, 5-(2-anilinoethyl)-2-methyl-	86
3358	-----, 2,6-diamino-	82
3445	Pyrimidine, 2-amino-4,6-dimethyl-	69
4035	-----, 5-amino-5-methyl-1,3-bis(1-methylheptyl)-hexahydro-	100
5739	-----, 1-(3-aminopropyl)-2-heptadecyl-1,x,x,x-tetrahydro-	71

TABLE I

Code No.	Classification and Name	K Value
	AMINES	
	Monosubstituted	
	Heterocyclic Compounds	
2892	Quinoline, 2-[2,2-bis[p-(dimethylamino)phenyl]-ethyl]-	-34
6372	-----, 8-[[6-(diethylamino)hexyl]amino]-2,6-dimethyl-, oxalate	100
6665	-----, 4-[(4-diethylamino-1-methylbutyl)amino]-6-(dimethylamino)-	82
2806	-----, 2-[p-(diethylamino)styryl]-	100
5191	1H-Tetrazole, 5-amino-	61
4338	s-Triazine, 4,6-bis(methylamino)-2-methyl-	100
4737	-----, 2,4-bis(methylamino)-6-phenyl-	97
4337*	-----, 2,4-diamino-6-benzyl-	89
5702*, 5703	-----, 2,6-diamino-4-(tert-butylamino)-	90, 70
4736	-----, 2,4-diamino-6-(2-cyclohexenyl)-	90
5605	-----, 2,6-diamino-4-[(2,4-diamino-s-triazin-4-yl)-amino]-	32
5598	-----, 2,6-diamino-4-[2-[[4-(2,6-diamino-s-triazin-4-yl)butyl]amino]but-2-yl]-	96
5599	-----, 2,6-diamino-4-[2-[[4-(2,6-diamino-s-triazin-4-yl)butyl]amino]prop-2-yl]-	55
5597	-----, 2,6-diamino-4-[2-[[(2,6-diamino-s-triazin-4-yl)methyl]amino]but-2-yl]-	63
5600	-----, 2,6-diamino-4-[1-[[(2,6-diamino-s-triazin-4-yl)methyl]amino]propyl]-	33
5607	-----, 2,6-diamino-4-[2-[[(2,6-diamino-s-triazin-4-yl)methyl]amino]prop-2-yl]-	12
5596	-----, 2,6-diamino-4-[2-(dimethylamino)ethyl]-	34
5595	-----, 2,6-diamino-4-[(dimethylamino)methyl]-	33
4735*	-----, 2,4-diamino-6-isopropyl-	97
5760	-----, 2,4-diamino-6-methyl-	73
5767*	-----, 2,4-diamino-6-octadecyl-	93
5591*	-----, 2,6-diamino-4-phenethyl-	92
4336	-----, 2,4-diamino-6-phenyl-	83
4734	-----, 2,4-diamino-6-piperidino-	91
4739	-----, 2,2'-o-phenylenebis[4,6-diamino-	84
5603	-----, 2,4,6-tri(isopropylamino)-	100
6770	-----, 1,3,5-tris[x-(dimethylamino)propyl]hexahydro-	1
5610	-----, 2,4,6-tris[(1,1,3,3-tetramethyl)butylamino]-	33
6086	1,2,4-Triazole, 3-amino-	26
5817	4H-1,2,4-Triazole, 4-amino-	43
5122*	-----, 3-amino-, picrate	100
5884	-----, 4-amino-3,5-diethyl-	55
5340	-----, 4-amino-3,5-dimethyl-	41
5883	monohydrochloride	50

TABLE I

Code No.	Classification and Name	K Value
	AMINES	
	Monosubstituted	
	Hydrazines and Derivatives	
5807	Hydrazine, (2-aminoethyl)-, monooxalate	64
6979	1,4-Phthalazinedione, 5-amino-2,3-dihydro-	42
	Hydroxylamines	
2986	2-Butanone, 3,3'-(ethylenedinitrilo)di-, dioxime	-32
2988	-----, 3,3'-(o-phenylenedinitrilo)di-, dioxime	61
5876	Propionaldehyde, 2-(dimethylamino)-2-methyl-, oxime	98
	Imides	
5768	Maleimide, N-anilino-	68
4818	Phthalimide, o-amino-	66
6478	-----, N-(5-amino-2-methylbenzyl)-	20
5262	-----, N-(anilinomethyl)-	60
5266	-----, N-[(4-biphenylamino)methyl]-	32
5260	-----, N-(m-toluidinomethyl)-	16
5263	-----, N-(2,4-xylidinomethyl)-	88
5267	-----, N-(2,5-xylidinomethyl)-	70
4824	Succinimide, α-anilino-N-phenyl-	-4
	Imines	
6040	2-Fluorenamine, N-[p-dimethylamino)benzylidene]-	53
4315	p-Phenylenediamine, N-benzylidene-	98
	Ketones	
7194	Acetophenone, 4'-amino-	94
5393	Benzophenone, 4,4'-diamino-	91
3265	d-Camphor, 3-amino-, monosulfate	42
4309	Chalcone, 4-(dimethylamino)-	78
6027	9-Fluorenone, 2-amino-	79
5414	-----, 2-(methylamino)-	89
6446	2-Pentanone, 4-ethyl-3-(dimethylamino)-	77
3455	2-Pentenophenone, 3-amino-	79
3881	2-Propanone, 1-diethylamino-	33
6541	1-Propanone, 1-(7-isopropyl-1-methyl-3-phenanthryl)-2-(dipentylamino)-, hydrochloride	45
5353	2'-Propionaphthone, 3-(dimethylamino)-, hydrochloride	63
3134	Propiophenone, 4'-amino-	93
	Lactams	
3615	5-Pyrazolone, 3-amino-1-phenyl-	58
6379	4(3H)-Quinazolone, 3-[2-(diethylamino)ethyl]-, dihydrobromide	76

TABLE I

Code No.	Classification and Name	K Value
	AMINES	
	Monosubstituted	
	Lactones	
2801	Phthalide, 3,3-bis[p-(dimethylamino)phenyl]-	-1
2802	-----, 3,3-bis[p-(dimethylamino)phenyl]-6-(dimethylamino)-	-239
	Nitriles	
2808	Acetonitrile, bis[p-(dimethylamino)phenyl]phenyl-	3
5882	-----, (ethylenedinitrilo)tetra-	76
7078	Benzonitrile, o-amino-, hydrochloride	65
4486	Cyanamide, dibenzyl-	85
5101	Glycinonitrile, N,N-diethyl-	26
5993	Hydratroponitrile, β-(benzylamino)-, hydrochloride	80
5992	-----, β-(cyclohexylamino)-, hydrochloride	94
5989	-----, β-(dimethylamino)-, hydrochloride	85
6269	-----, β-(ethylamino)-, hydrochloride	96
6383	-----, β-(isopropylamino)-, hydrochloride	94
5090	Propionitrile, 3-anilino-	67
5096	-----, 3-(N-ethylanilino)-	86
5093	-----, 3-(o-ethylanilino)-	90
5927	-----, 2,2'-(ethylenediimino)bis[2-methyl-	11
4856	-----, 3-(isopropylamino)-, salt with 1 f. wt. pentachlorophenol	92
5094	-----, 3-(N-methylanilino)-	97
6408	-----, 3-(octadecylamino)-	74
	Nitro Compounds	
4754	Aniline, N-allyl-2,4-dinitro-	88
4361	-----, N-ethyl-2,4-dinitro-	97
4307	-----, 4,4'-(p-nitrobenzylidene)bis[N,N-dimethyl-	51
4044	Benzylamine, N-(2-methyl-2-nitropropyl)-N-phenyl-	56
3525	Cyclohexylamine, N-(2,4-dinitrophenyl)di-	81
4770	Dibenzylamine, N-(2,4-dinitrophenyl)-	32
3941	1,5-Pentanediamine, 3,3-dinitro-, hydrochloride	85
5282	Toluene-2,4-diamine, 6-nitro-	96
6380	p-Toluidine, N,N-dimethyl-α-(2-nitro-9-fluorenylidene)-, low melting isomer	46
5281	-----, 3,5-dinitro-	78
6994	Triphenylamine, 2-nitro-	(T)
	Nitroso Compounds	
4667	Aniline, N,N-dimethyl-p-nitroso-	99
3017	Benzylamine, N-cyclohexyl-N-nitroso-	83

TABLE I

Code No.	Classification and Name	K Value
	AMINES	
	Monosubstituted	
	Phenols	
4239	9,10-Anthradiol, 1,4-diamino-	0
6659	o-Cresol, 4,6-bis(1-methylheptyl)-α-(dimethylamino)-	84
6656	-----, 4-tert-butyl-6-cyclohexyl-α-(dimethylamino)-	98
6661	-----, α-(dimethylamino)-x-dodecyl-	94
6660	-----, α-(dimethylamino)-4-(1-methylheptyl)-	100
6625	-----, α-(dimethylamino)-4-(1,1,3,3-tetramethylbutyl)-	79
6621	Phenol, 2-amino-4-arsenoso-, hydrochloride	95
3994	-----, 4-anilino-2-tert-butyl-	76
6223	-----, p-(benzylamino)-	40
4814	-----, 2-tert-butyl-4-(butylamino)-	80
4346	-----, 2-tert-butyl-4-isopropyl-6-[(dimethylamino)methyl]-	89
3262	-----, 2,4,6-triamino-, trihydrochloride	95
5412	Resorcinol, 5-amino-	63
4043	Salicylamine, N-phenyl-	45
6657	2,6-Xylenol, α^2-(diethylamino)-4-(1,1,3,3-tetramethylbutyl)-	97
6664	-----, α^2-(dimethylamino)-4-(1-methylheptyl)-	97
	Sulfones	
6637	Aniline, N-propyl-4,4'-sulfonyldi-	75
6239	-----, 4,4'-sulfonyldi-	47
6703	Dodecylamine, N-[p-(sulfanilyl)]-	-20
	Sulfonic Acids	
4248	2,2'-Biphenyldisulfonic acid, 4,4'-diamino-	-130
3450	3,3'-Biphenyldisulfonic acid, 4,4'-diamino-	79
5295	Metanilic acid, 6-(p-aminoanilino)-	50
3273	1,3,6-Naphthalenetrisulfonic acid, 8-amino-, disodium salt	6
4023	Naphthionic acid, sodium salt	14
2919	Sulfanilic acid, N,N-dimethyl-	62
	Thiocarbamates	
3643	Carbamic acid, (2-aminoethyl)dithio-	77
4031	-----, dimethyldithio, m-toluidinomethyl ester	100
3058	Cyclohexanecarbamic acid, N-2-(cyclohexylamino)-ethyldithio-	57

TABLE I

Code No.	Classification and Name	K Value
	AMINES	
	Monosubstituted	
	Thioureas	
5520	Pseudourea, 2-(2-aminoethyl)-2-thio-, dihydrobromide	92
7215	-----, 2-[(diethylamino)ethyl]-2-thio-, dihydrochloride	88
5704*	-----, 2-[2-(dimethylamino)ethyl]-2-thio-, dihydrochloride	98
	Ureas	
5794	Hydantoin, 1-amino-, monohydrochloride	87
6397	2-Imidazolidinone, 1-(2-aminoethyl)-	6
2911	Uracil, 6-amino-	28
2912	-----, 5,6-diamino-, salt with 1/2 f. wt. sulfuric acid	27
4942	Urea, cyclohexylaminomethyl-	84
	Miscellaneous	
7067	Anthraquinone, 1-amino-	40
3703	Benzaldehyde, p-(dimethylamino)-, thiosemicarbazone	25
4249	Ethanol, 2,2'-iminodi-, diester with potassium hydrogen sulfate, hydrate	-135
3432	Iodonium compounds. bis(aminophenyl)----- iodide	52
5680*	Thiocyanic acid, p-(dimethylamino)phenyl ester, salt with 1 f. wt. toluenesulfonic acid	99
	Disubstituted	
	Alcohol-Ethers	
6622	1-Naphthalenemethanol, α-(2-dibutylamino-1,1-dimethylethyl)-4-methoxy-, hydrochloride	94
6538	-----, α-(dibutylaminomethyl)-2-methoxy-, hydrochloride	92
6658	-----, α-(dipentylaminomethyl)-2-methoxy-, hydrochloride	96
6536	9-Phenanthrenemethanol, α-(N-butyl-p-methoxyanilinomethyl)-1,2,3,4-tetrahydro-, hydrochloride	85
	Alcohol-Halides	
5111	Aniline, o-chloro-N,N-bis(2-hydroxypropyl)-	83
6559	Benzyl alcohol, o-chloro-α-(dioctylaminomethyl)-	91
6672	Ethanol, 2-(p-bromobenzylamino)-, hydrochloride	73
5105	-----, 2-(m-chloroanilino)-	81
5103	-----, 2-(o-chloroanilino)-	82

TABLE I

Code No.	Classification and Name	K Value
	AMINES	
	Disubstituted	
	Alcohol-Halides	
5333	Ethanol, 2,2'-(m-chloroanilino)bis-	65
5120	-----, 2-(2,5-dichloroanilino)-	77
6676	1-Naphthalenemethanol, 4-bromo-α-(dodecylamino-methyl)-	42
6669	-----, 4-chloro-α-(2-diethylaminoethyl)-, hydrochloride, hydrate	100
6640	-----, 2-chloro-α-(dihexylaminomethyl)-, hydrochloride	93
6670	-----, 2-chloro-α-(dipentylaminomethyl)-, hydrochloride	96
4813	2-Propanol, 1,1'-o-chloroanilinobis-	94
5334	-----, 1-chloro-3-(N-ethyl-m-toluidino)-	80
	Alcohol-Phenols	
6662	Ethanol, 2-(5-tert-butyl-2-hydroxybenzylamino)-	98
6655	-----, 2,2'-(5-tert-butyl-2-hydroxybenzyl-amino)bis-	98
6702	-----, 2,2'-(5-tert-butyl-2-hydroxy-3-phenyl-benzylamino)bis-	99
6654	-----, 2-[5-(1,1-dimethylpropyl)-2-hydroxybenzyl-amino]-	97
6018	-----, 2,2'-(p-hydroxyanilino)bis-	44
5330	-----, 2-(o-hydroxybenzylamino)-	34
6649	-----, 2-(2-hydroxy-3-phenylbenzylamino)-	83
	Amide-Ethers	
4940	Acetamide, 2-(6-methoxy-m-toluidino)-	74
4838*	p-Acetanisidide, 2'-amino-	97
	Amide-Halides	
4939	Acetamide, 2-(m-bromoanilino)-	95
4941	-----, 2-(m-chloroanilino)-	66
	Amide-Heterocyclic Compounds	
2710	Phenothiazine, 10-benzoyl-3,7-bis(dimethylamino)-	-6
5701	s-Triazine, 4-[(2-acetamidoethyl)amino]-2,6-diamino-	43
5699	2-s-Triazineacetamide, 4,6-diamino-	42
	Ether-Halides	
4562	Aniline, 3-chloro-4-(p-chlorophenoxy)-, hydrochloride	96
4681	Triethylamine, 2-pentachlorophenoxy-	96

TABLE I

Code No.	Classification and Name	K Value
	AMINES	
	Disubstituted	
	Ether-Heterocyclic Compounds	
6230	Doxylamine, succinate	91
6225	Lepidine, 8-[[2-(diethylamino)ethyl]amino]-6-methoxy-, dihydrochloride	95
6226	-----, 6-methoxy-8-[[1-methyl-4-(propylamino)-butyl]amino]-, dihydrochloride	87
6280	Quinoline, 8-[(3-aminopropyl)amino]-6-methoxy-, dihydrochloride	90
3995	-----, 8-amino-6-methoxy-, monohydrochloride	81
6387	-----, 8-[6-[(4-benzylpiperazin-1-yl)hexyl]-amino]-6-methoxy-, dioxalate	93
6283	-----, 8-[[6-(diallylamino)hexyl]amino]-6-methoxy-	96
6285	-----, 8-[[5-(isopropylamino)pentyl]amino]-6-methoxy-3,4-dimethyl-, dihydrobromide	97
6282	-----, 6-methoxy-8-[[5-[(1-methylbutyl)amino]-pentyl]amino]-, monohydrochloride	95
5616	s-Triazine, 2,6-diamino-4-[1-(butoxy)ethyl]methyl-	60
5601*	-----, 2,6-diamino-4-[1-[1-(ethoxy)ethoxy]cyclohexyl]-	93
	Ether-Imides	
5261	Phthalimide, N-[(p-ethoxyanilino)methyl]-	-7
5268	-----, N-[(p-methoxyanilino)methyl]-	71
	Ether-Nitriles	
4362	Acetonitrile, 2-(o-anisidino)-	100
5087	Propionitrile, 3-(o-anisidino)-	93
5088	-----, 3-(p-phenetidino)-	83
	Ether-Nitro Compounds	
3885	p-Anisidine, 2,6-dinitro-	74
4369	o-Anisidine, N-(2,4-dinitrophenyl)-	72
4669	Dibenzylamine, N-[2-(2,4-dinitrophenoxy)ethyl]-	84
5279	p-Phenetidine, 2-nitro-	81
	Halide-Heterocyclic Compounds	
3472	Pyrimidine, 2-amino-4-chloro-6-methyl-	64
6633	Quinoline, 7-bromo-4-[[4-(diethylamino)-1-methyl-butyl]amino]-, diphosphate	97
5609	s-Triazine, 2,4-bis[(1,1,3,3-tetramethylbutyl)amino]-6-chloro-	-2
5612	-----, 2,6-di(tert-butylamino)-4-chloro-	99
5611	-----, 4-chloro-2,6-di(isopropylamino)-	93
4925	-----, 4,6-diamino-2-chloro-	75

TABLE I

Code No.	Classification and Name	K Value
	AMINES	
	Disubstituted	
	Halide-Heterocyclic Compounds	
5614	s-Triazine, 2,4-diamino-6-chloro-	95
4794	-----, 2,4-dichloro-6-(o-chloroanilino)-	80
5613	-----, 2,6-dichloro-4-(cyclohexylamino)-	76
	Halide-Imides	
5265	Phthalimide, N-[(m-bromoanilino)methyl]-	38
6271	-----, 3,4,5,6-tetrachloro-N-[2-(diethylamino)ethyl]-	43
5264	-----, N-[(p-iodoanilino)methyl]-	37
	Halide-Ketones	
6677	Acetophenone, 2-[benzyl[(p-diethylamino)benzyl]-amino]-3',4'-dichloro-, dihydrochloride	61
6556	-----, 4'-bromo-2'-(N-methylanilino)-	32
6710	Ketone, 9(or 10)-bromo-3-phenanthryl (diethyl-amino)methyl	68
6641	Propiophenone, 3-(benzylmethylamino)-4'-chloro-, hydrochloride	88
	Halide-Nitriles	
5091	Propionitrile, 3-(m-chloroanilino)-	71
5092	-----, 3-(o-chloroanilino)-	83
	Halide-Nitro Compounds	
4139	Aniline, 2-chloro-4-nitro-	86
4140	-----, 4-chloro-2-nitro-	88
3449	m-Toluidine, 2,6-diiodo-4-nitro-	60
	Halide-Quaternary Nitrogen Compounds	
	Ammonium compounds.	
4743	[4-[(o-chlorophenyl)[p-(dimethylamino)phenyl]methyl-ene]-2,5-cyclohexadienylidene]dimethyl----- chloride	98
	Pseudoindolium compounds.	
4744	2-[4-[(2-chloroethyl)ethylamino]-2-methylstyryl]-1,3,3-trimethyl-3H------ chloride	99
4742	2-[p-[(2-chloroethyl)methylamino]styryl]-1,3,3-trimethyl-3H------ chloride	87
	Halide-Sulfones	
6636	Aniline, 3-chloro-4,4'-sulfonyldi-	81
2920	m-Toluidine, 6-ethylsulfonyl-, α,α,α-trifluoro-	71

TABLE I

Code No.	Classification and Name	K Value
	AMINES	
	Disubstituted	
	Heterocyclic-Ketones	
5615	2-Pentanone, 4-(4,6-diamino-s-triazin-2-yl)-4-methyl-	68
4329	4-Penten-2-one, 3,3-bis[2-(4,6-diamino-s-triazin-2-yl)ethyl]-4-methyl-	40
6476	Propiophenone, 2-(benzylmethylamino)-3-morpholino-3-phenyl-	58
	Heterocyclic-Nitriles	
5429	s-Triazine, 2,2'-(3-cyano-3-phenylpentamethylene)-bis[4,6-diamino-	10
5606	-----, 2,6-diamino-4-[(1-cyanocyclohexyl)methylamino]-	59
5608	-----, 2,6-diamino-4-[[N-(cyanomethyl)-1,1,3,3-tetramethylbutyl]amino]-	21
5700	-----, 2,6-diamino-4-(o-cyanophenyl)-	87
5604	-----, 2,6-diamino-4-[(1-cyanopropyl)methylamino]-	-1
	Ketone-Phenols	
6308	Acetophenone, 3',4'-dihydroxy-2-[(3-phenylpropyl)amino]-, hydrochloride	63
6087	3-Buten-2-one, 4-(p-hydroxy-N-methylanilino)-	37
	Nitrile-Phenols	
4724	Propionitrile, 3,3'-[(2-hydroxynaphth-1-ylmethyl)-imino]bis-	58
4481	-----, 3,3'-(5-phenylsalicylimino)bis-	74
	Miscellaneous	
2890	Acetoacetic acid, α-[bis[p-(dimethylamino)phenyl]-methyl]-, ethyl ester	32
4360	Acetophenone, 2-[p-(dimethylamino)phenylimino]-2-phenyl-	74
5343	Acrylic acid, 3-(m-chloroanilino)-2-(ethyoxycarbonyl)-, ethyl ester	46
2921	o-Anisidine, 5-(ethylsulfonyl)-	32
3132	Anthranilic acid, 3,5-dichloro-	56
6623	Benzoic acid, p-amidino-, ethyl ester, hydrochloride	79
6699	-----, 3,5-bis[(dimethylamino)methyl]-4-hydroxy-, methyl ester	60
5878	-----, p-[bis(2-hydroxyethyl)amino]-, ethyl ester	43
6477	2H-1-Benzopyran-3-carboxylic acid, 8-allyl-2-oxo-, 2-(dibenzylamino)ethyl ester, hydrochloride	58

TABLE I

Code No.	Classification and Name	K Value
	AMINES	
	Disubstituted	
	Miscellaneous	
6697	p-Benzoquinone, 2,5-bis(2-pyridylamino)-	21
6233	Benzothiazole, 6-amino-2-mercapto-	92
3219	Carbamic acid, N-(2-cyanoethyl)-N-2-[[(2-cyanoethyl)amino]ethyl]dithio-	63
6673	o-Cresol, 6-bromo-4-tert-butyl-α-(dimethylamino)-	96
7055	Disulfide, bis(2-amino-5-sulfamoylphenyl)	69
5695	Ethanol, 2-(2,6-diamino-s-triazin-4-ylthio)-	46
4895	-----, 2-(2,4-dinitroanilino)-	84
3972	D-Glucoside, 1-[bis(2-hydroxyethyl)amino]-	-27
5647	Imidazole, 4,5-dihydro-1-(2-aminoethyl)-2-[(3,4-dichlorobenzyl)thio]-, dihydrochloride	88
5327	Maleinimide, N-m-[bis(2-hydroxyethyl)amino]phenyl-	-3
5510	1,4-Naphthoquinone imine, 2-amino-, monohydrochloride	100
6063	2-Phenazinol, 8-amino-7-methyl-	20
4889	Phenol, p-(2,4-dinitroanilino)-	9
5269	Phthalimide, N-[p-(methylcarbamoyl)anilinomethyl)-	74
5619	2-Piperazinone, 4-(4,6-diamino-s-triazin-2-yl)-3,3-dimethyl-	94
4927	Propionitrile, 3-[N'-(2-hydroxyethyl)anilino]-, sulfate	56
	Pseudoindolium compounds.	
4719	2-[2-(2,4-dimethoxyanilino)vinyl]-1,3,3-trimethyl-3H-----chloride	66
4740	1,3,3-trimethyl-2-[2-[[2-methylbenzothiazol-5(or 6)-yl]-amino]vinyl]-3H------ chloride	90
6291	Pyridine, 5-amino-2-sulfanilyl-	77
5312, 5803	-----, 2-(furfurylamino)-	86, 99
5534	γ-Resorcylic acid, 4-amino-, hydrogensulfate	64
5669	Thiocyanic acid, 3-chloro-4-(dimethylamino)phenyl ester	100
5935	s-Triazine, 2-amino-4-benzenesulfonamido-6-phenyl-	15
4721	-----, 2,4-diamino-6-(2-furyl)-	98
4339	-----, 2,4-diamino-6-(methylthio)-	100
5761	-----, 2,4-diamino-6-(3-sulfopropyl)-, sodium salt	45
4490	-----, 2,2'-[oxybis(ethylenethio)]bis[4,6-diamino-	25
	Polysubstituted	
5117	Acetic acid, [(2-amino-5-ethoxyphenyl)thio]-	81
6642	Acetophenone, 2-(benzylmethylamino)-3'-chloro-4'-ethoxy-, hydrochloride	87
2995	-----, 4'-[(2,2,2-trichloro-1-hydroxyethyl)amino]-	71
6646	Acridine, 6-chloro-9-[[4-(diethylamino)-1-(4-pyridyl)-butyl]amino]-2-methoxy-, trihydrochloride, monohydrate	98

TABLE I

Code No.	Classification and Name	K Value
	AMINES	
	Polysubstituted	
6555	Acridine, 6-chloro-9-[β-[2-(diethylamino)ethyl]-phenethylamino]-2-methoxy-, dihydrochloride	95
6644	-----, 6-chloro-9-[α-[3-(diethylamino)propyl]phenethylamino]-2-methoxy-, dihydrochloride, trihydrate	98
6560	-----, 6-chloro-9-[β-[2-(dimethylamino)ethyl]phenethylamino]-2-methoxy-, dihydrochloride	88
5545	Ammonium compounds. hexadecyl[2-[(p-methoxybenzyl)-2-pyrimidinyl-amino]ethyl]dimethyl----- bromide	82
4935	o-Anisidineethanol, α-chloromethyl-	67
7224	Anthranilic acid, 4-chloro-N-(p-methoxyphenyl)-	69
6558	Benzyl alcohol, α-(benzylethylaminomethyl)-3-chloro-4-ethoxy-, hydrochloride	92
6557	-----, α-(benzylmethylaminomethyl)-3-chloro-4-ethoxy-, hydrochloride	66
5432	o-Cresol, 6,6'-thiobis[4-chloro-α-(dimethylamino)-	97
3675	Crotonic acid, α-anilino-β-chloro-γ-hydroxy-γ-methoxy-, γ-lactone	34
4752	Ethanol, 1-(4-amino-6-phenyl-s-triazin-2-ylamino)-2,2,2-trichloro- and s-Triazine, 2,4-bis(2,2,2-trichloro-1-hydroxyethylamino)-6-phenyl-	25
6674	-----, 2-(3-bromo-5-tert-butyl-2-hydroxybenzylamino)-	98
6675	-----, 2-(5-tert-butyl-3-chloro-2-hydroxybenzylamino)-	100
6094	-----, 2-[N-(3-chloroallyl)-5-chloro-3-methoxyanilino]-	80
6316	-----, 2-[[4-(7-chloro-4-quinolylamino)pentyl]ethylamino]-, monosulfate	99
5801	DL-2-Furanserine	48
3654	Melamine, N^2,N^4,N^6-tris(2-benzothiazolylthiomethyl)-	3
4120	2,7-Naphthalenedisulfonic acid, 3-(p-aminophenylazo)-4,5-dihydroxy-, disodium salt	23
6638	Nicotinanilide, 4'-sulfanilyl-	64
5620	Piperazone, 4-[4,6-bis(chloroamino)-s-triazin-2-yl]-1-chloro-3,3-dimethyl-	92
6667	2-Propanol, 1-(7-chloro-4-quinolylamino)-3-diethylamino-, diphosphate	97
6309	Protocatechuyl alcohol, α-[1-(p-methoxyphenyl)-2-propylaminomethyl]-, hydrochloride	89
3133, 7221	4-Pyrimidinol, 2,6-diamino-5-nitroso-	-9, -48
6067	Quinocrine, salt with 1 f. wt. sulfamic acid	82
6319	4-Quinolinemethanol, 7-chloro-2-(p-chlorophenyl)-α-(diethylaminomethyl)-, hydrochloride	94
6320	-----, 3-(p-chlorophenyl)-α-(diethylaminomethyl)-6-methoxy-	75

TABLE I

Code No.	Classification and Name	K Value
	AMINES	
	Polysubstituted	
6540	4-Quinolinemethanol, α-(3-dibutylaminopropyl)-6-methoxy-, hydrochloride	93
	Quinolinium compounds.	
6069	4-chloro-2-[p-(dimethylamino)phenyliminomethyl]-6-methoxy-1-methyl----- chloride	89
6472	Salicylic acid, 5-bromo-3-phenyl-, 2-(diisopropylamino)ethyl ester, hydrochloride	71
6487	-----, 5-iodo-3-phenyl, 2-(isopropylamino)ethyl ester, hydrochloride	65
2803	Spiro[pseudoisoindole-1,9'-xanthen]-3(2H)-one, 3',6'-bis(diethylamino)-	-4
6068	Sulfanil-p-anisidide, N^4-(1-sulfoethyl)-2'-(1-sulfoethylamino)-, disodium salt, tetrahydrate	24
7106	4H-1,2,4-Triazole, 4-amino-3-hydrazino-5-mercapto-	96
	AMINE OXIDES	
5512	Trimethylamine, N-oxide, dihydrate	42
	ANTIMONY COMPOUNDS	
6961	Stibine, triphenyl-	42
6962	dichloride	36
3374	-----, tri-p-tolyl-	-23
	ARSENIC COMPOUNDS	
3373	Arsine, tri-p-tolyl-	-22
3016	Benzenearsonic acid, p-(4-biphenylylsulfamoyl)-	100
3013	-----, p-morpholinylsulfonyl-	81
3014	-----, p-(1-piperidylsulfonyl)-	56
3011	-----, p-sulfamoyl-	77
3015	Benzesulfonanilide, 4-arsenoso-	45
3377	1-Butanearsonic acid, 3-methyl-	90
4008	Ethane, thioarsenoso-	100
3012	Morpholine, 4-(p-arsenosophenylsulfonyl)-	60
6621	Phenol, 2-amino-4-arsenoso-, hydrochloride	95
3376	2-Propene-1-arsonic acid	82
3339	α-Toluenearsonic acid	98
4418	Xanthic acid, tert-butyl-, arsenic(III) salt	97

TABLE I

Code No.	Classification and Name	K Value
	AZO AND AZOXY COMPOUNDS	
5050	Acetanilide, 4'-phenylazo-	72
5051	o-Acetotoluidide, 4'-(m-tolylazo)-	70
6028	Aniline, 3,3'-azoxydi-	-52
4442	Benzanilide, 4-chloro-4'-phenylazo-	25
4689	-----, 2,4-dichloro-4'-phenylazo-	16
4120	2,7-Naphthalenedisulfonic acid, 3-(p-amino-phenylazo)-4,5-dihydroxy-, disodium salt	23
4000	Phenol, p-phenylazo-	96
5187	Pinonic acid, azine	96
4751*	2-Pyrazoline-3-carboxylic acid, 5-oxo-1-(o-sulfophenyl)-4-(o-sulfophenylazo)-, salt with 2 f. wt. dicyclohexylamine	100
4411	o-Toluidine, 4-(o-tolylazo)-	91
	BISMUTH COMPOUNDS	
3620	Benzoic acid, o-chloro-, bismuth(III) salt	-44
3120	Bismuthine, triphenyl-, triiodonium chloride	83
5948	Carbamic acid, ethylenebis[dithio-, bismuth(III) salt	65
	BORON COMPOUNDS	
3589	Abietylamine, compound with 1/3 f. wt. boron trifluoride	65
3587	Allylamine, compound with 1 f. wt. boron trifluoride	95
3146	Aniline, compound with 1 f. wt. boron trifluoride	44
3333	Benzeneboronic acid	28
6474	Boric acid, cyclic ester with 2,2-dimethyl-1,3-propanediol, diester with 2,2-dimethyl-1,3-propanediol	21
6989	triisopropyl ester	-23
6990	trimethyl ester, in methanol	25
4496	-----, triphenylmercuri(II) derivative	97
3144	Diethylamine, compound with 1 f. wt. boron trifluoride	45
7256	Dimethylamine, compound with diborane	92
3158	Dodecylamine, N,N-bis(2-hydroxyethyl)-, compound with 1 f. wt. boron trifluoride	73
3159	compound with 1/2 f. wt. boron trifluoride	93
3160	compound with 1/3 f. wt. boron trifluoride	82
3147	-----, compound with 1 f. wt. boron trifluoride	67
3148	compound with 1/2 f. wt. boron trifluoride	90
3149	compound with 1/3 f. wt. boron trifluoride	96
3150	Hexadecylamine, compound with 1 f. wt. boron trifluoride	67
3151	compound with 1/2 f. wt. boron trifluoride	97
3152	compound with 1/3 f. wt. boron trifluoride	96
3379	1-Naphthaleneboronic acid	46

TABLE I

Code No.	Classification and Name	K Value
	BORON COMPOUNDS	
3156	Octadecylamine, compound with 1 f. wt. boron trifluoride	92
3157	compound with 1/2 f. wt. boron trifluoride	91
3164	Octylamine, N,N-bis(2-hydroxyethyl)-, compound with 1/3 f. wt. boron trifluoride	73
3145	-----, compound with 1 f. wt. boron trifluoride	76
3588	Propylamine, compound with 1 f. wt. boron trifluoride	55
7257	Pyridine, compound with diborane	100
3161	Tetradecylamine, N,N-bis(2-hydroxyethyl)-, compound with 1 f. wt. boron trifluoride	99
3162	compound with 1/2 f. wt. boron trifluoride	88
3163	compound with 1/3 f. wt. boron trifluoride	92
5153	-----, compound with 1/4 f. wt. boron trichloride	100
3153	compound with 1 f. wt. boron trifluoride	41
3154	compound with 1/2 f. wt. boron trifluoride	94
3155	compound with 1/3 f. wt. boron trifluoride	93
7255	Trimethylamine, compound with diborane	2
3331	Tripentylamine, compound with 1 f. wt. boron trifluoride	95
3330	Urea, compound with 1/4 f. wt. boron trifluoride	5
	CARBAMATES	
	Unsubstituted	
4117	m-Benzenedicarbamic acid, diisopropyl ester	70
5443	dimethyl ester	49
6691	2-Benzoxazolinone	56
5537	Bicarbamic acid, dimethyl ester	74
4330	4,4'-Bicarbanilic acid, diisopropyl ester	65
4332	-----, 3,3'-dimethyl-, diisopropyl ester	68
5544	2-Butyne-1,4-diol, dicarbanilate	38
6032	3-Butyn-2-ol, carbanilate	79
5182	-----, 2-methyl-, carbanilate	84
3354	Carbamic acid, isopropyl ester	63
2915	methylallyl ester	78
3352	-----, benzyl-, ethyl ester	68
4892	-----, diphenyl-, ethyl ester	82
5480	-----, dipropyl-, phenyl ester	77
5475	-----, methyl-, phenyl ester	58
5924	-----, (1,1,3,3-tetramethylbutyl)-, isopropyl ester	15
3908	Carbanilic acid, allyl ester	83
3301	benzyl ester	63
3302	butyl ester	60
5466, 5759	crotyl ester	46, 69
5912	cyclopentyl ester	69
3303	dodecyl ester	23

TABLE I

Code No.	Classification and Name	K Value
	CARBAMATES	
	Unsubstituted	
3999	Carbanilic acid, ethyl ester	96
5469	2-ethylhexyl ester	91
3626	isopropyl ester	75
3679	methyl ester	28
5016	2-methylallyl ester	72
5185	phenethyl ester	34
5478	phenyl ester	72
3680	propyl ester	84
6092	2-propynyl ester	68
5244	-----, N-allyl-, isopropyl ester	97
5245	-----, N-2-butenyl-, isopropyl ester	97
4672	-----, 2,3-dimethyl-, isopropyl ester	79
4673	-----, 2,4-dimethyl-, isopropyl ester	95
4674	-----, 2,5-dimethyl-, isopropyl ester	79
4675	-----, 2,6-dimethyl-, isopropyl ester	98
4676	-----, 3,5-dimethyl-, isopropyl ester	79
4367	-----, m-methyl-, isopropyl ester	94
6033	2-propynyl ester	92
3686	-----, p-methyl-, allyl ester	94
5238	-----, o-phenyl-, ethyl ester	83
5242	-----, N-vinyl-, isopropyl ester	94
5539	Cyclohexanol, dl-cis-3,3,5-trimethyl-, carbanilate	97
5540	-----, dl-trans-3,3,5-trimethyl-, carbanilate	97
4370	2-p-Cymenecarbamic acid, isopropyl ester	89
3854	Ethylene glycol, dicarbanilate	12
5925	Geraniol, carbanilate	74
5541	4-Heptanol, 2,6-dimethyl-, carbanilate	76
5915	-----, 4-ethynyl-2,6-dimethyl-, carbanilate	72
5189	3-Hexyne-2,5-diol, 2,5-dimethyl-, dicarbanilate	50
5914	Linalool, carbanilate	87
5913	Methylparafynol, carbanilate	88
3300	1-Naphthalenecarbamic acid, allyl ester	64
5341	Neopentyl glycol, dicarbanilate	40
6809	2-Oxazolidinone, 5-methyl-	58
6810	-----, 5-phenyl-	48
5246	1,4-Piperazinedicarboxylic acid, 2,5-dimethyl-, diisopropyl ester	97
5243	1-Piperidinecarboxylic acid, 5-ethyl-2-methyl-, isopropyl ester	97
5240	-----, isopropyl ester	81
5023	2-Propyn-1-ol, carbanilate	88
4896	1-Pyrrolidinecarboxylic acid, isopropyl ester	84
6034	α-Terpineol, carbanilate	43

TABLE I

Code No.	Classification and Name	K Value
	CARBAMATES	
	Monosubstituted	
	Alcohols	
6811	Carbamic acid, 2-hydroxyethyl ester	-57
5017	2-hydroxypropyl ester	-3
6814	-----, benzyl-, 2-hydroxyethyl ester	58
5019	-----, bis(2-hydroxyethyl)-, 2-hydroxyethyl ester	39
5027, 6808	-----, dodecyl-, 2-hydroxyethyl ester	59, 64
5021	-----, ethylenedi-, bis(2-hydroxyethyl) ester	7
5188	-----, hexadecyl-, 1(or 2)-monoester with 1,2-propanediol	74
5755	-----, (3-hydroxy-2,2-dimethylpropyl)-, ethyl ester	45
5018	-----, 2-hydroxyethyl-, 2-hydroxyethyl ester	22
6802	2-hydroxypropyl ester	-17
5022	-----, isopentyl-, 2-hydroxyethyl ester	56
5030	-----, octadecyl-, 2-hydroxyethyl ester	50
	Amines	
5461	Carbanilic acid, 2-amino-, isopropyl ester	76
5468	-----, 2-(diethylamino)ethyl ester	93
6251	-----, 1-(dimethylamino)prop-2-yl ester	59
	Esters	
6300	Ethylene glycol, monoacetate, monocarbanilate	61
5184	Hydracrylic acid, carbanilate, butyl ester	73
4900	Lactic acid, carbanilate, benzyl ester	55
5183	-----, 2-methyl-, carbanilate, ethyl ester	71
5916	Mandelic acid, carbanilate, butyl ester	45
	Ethers	
4679	4,4'-Bicarbanilic acid, 3,3'-dimethoxy-, diisopropyl ester	48
4371	Carbanilic acid, 2,5-diethoxy-, isopropyl ester	61
4875	-----, 2,4-dimethoxy-, isopropyl ester	69
4368	-----, m-ethoxy-, isopropyl ester	65
4671	-----, m-methoxy-, isopropyl ester	79
5286	2-Propanol, 1-phenoxy-, carbanilate	48
	Halides	
5290	Allyl alcohol, 1-(chloromethyl)-, m-chlorocarbanilate	93
5257	4,4'-Bicarbanilic acid, 3,3'-dichloro-, diisopropyl ester	-15
5917	2-Butanol, 3-methyl-, m-chlorocarbanilate	74
5292	-----, 1,3,4-trichloro-, carbanilate	69
5467	2-Butenol, 3-chloro-, carbanilate	59

TABLE I

Code No.	Classification and Name	K Value
	CARBAMATES	
	Monosubstituted	
	Halides	
4493	Carbamic acid, 2-chloroethyl ester	92
6258	2-fluoroethyl ester	(T)
5479	-----, dimethyl-, p-chlorophenyl ester	95
5476	-----, ethyl-, p-chlorophenyl ester	61
3681	Carbanilic acid, 2-chloroethyl ester	84
5764	2,4-dichlorophenyl ester	58
3858, 6257	2-fluoroethyl ester	(T), 87
5459	-----, m-chloro-, allyl ester	91
6259	sec-butyl ester	86
6264	tert-butyl ester	47
5562	2-chloroallyl ester	86
5288	3-chloroallyl ester	93
4879	2-chloroethyl ester	64
6265	2-cyclopenten-1-yl ester	32
5932	1,1-dimethylpropyl ester	86
6261	2-fluoroethyl ester	99
5559	α-methylbenzyl ester	52
5933	1-methylbutyl ester	86
5934	2-methylbutyl ester	54
3364	propyl ester	69
5553	2-propynyl ester	92
3367	-----, o-chloro-, ethyl ester	65
5462	isopropyl ester	93
3365	-----, p-chloro-, isopropyl ester	72
6321	2-propynyl ester	78
4916	-----, 5-chloro-2-methyl-, 2-chloroethyl ester	76
4340	isopropyl ester	81
5464	-----, m-chloro-N-methyl-, isopropyl ester	90
4375	-----, 3-chloro-2-methyl-, isopropyl ester	50
4376	-----, 3-chloro-4-methyl-, isopropyl ester	70
4913	-----, 2,5-dichloro-, 2-chloroethyl ester	54
3363	isopropyl ester	73
5930	2-propynyl ester	87
4687	-----, 2,3-dichloro-, isopropyl ester	82
4373	-----, 2,4-dichloro-, isopropyl ester	74
5156	-----, 3,5-dichloro-, isopropyl ester	85
4688	-----, 3,5-dichloro-2-methyl-, isopropyl ester	77
4917	-----, m-methyl-, 2-chloroethyl ester	87
5482	-----, m-(trifluoromethyl)-, isopropyl ester	63
5560	Cyclohexanol, 1-ethynyl-, m-chlorocarbanilate	41
4121	Ethylene glycol, bis(m-chlorocarbanilate)	6
5296	Indan, 4-hydroxy-, m-chlorocarbanilate	83
5297	-----, 5-hydroxy-, m-chlorocarbanilate	7

TABLE I

Code No.	Classification and Name	K Value
	CARBAMATES	
	Monosubstituted	
	Halides	
5465	2-Propanol, 1-chloro-, m-chlorocarbanilate	47
5460	m-methylcarbanilate	75
5037	-----, 1,3-dichloro-, m-chlorocarbanilate	74
5291	-----, 3,3,3-trichloro-2-methyl-, carbanilate	22
	Heterocyclic Compounds	
4873	Carbamic acid, furfuryl-, isopropyl ester	85
3673, 5181	Furfuryl alcohol, carbanilate	59, 92
5805	2-Imidazoline-1-ethanol, 2-(x-heptadecenyl)-, carbanilate	81
5014	4-Morpholineethanol, carbanilate	86
5020	4-Morpholinecarboxylic acid, isopropyl ester	89
5538	Pyran-2-methanol, tetrahydro-, carbanilate	75
5176	2-Pyridinecarbamic acid, 3-methyl-, isopropyl ester	89
5177	-----, 4-methyl-, isopropyl ester	70
5178	-----, 5-methyl-, isopropyl ester	73
5179	-----, 6-methyl-, isopropyl ester	81
4899	-----, 4,6-dimethyl-, isopropyl ester	92
5284	2-Pyridineethanol, carbanilate	56
5911	3-Pyridinol, carbanilate	80
5535	8-Quinolinol, carbanilate	65
5174	1H-Tetrazole-5-carbamic acid, ethyl ester	85
4137	2-Thiazolecarbamic acid, 4,5-bis(chloromercuri)-, benzyl ester	68
4136	-----, ethyl ester	81
	Nitriles	
4366	Carbanilic acid, m-cyano-, isopropyl ester	87
4874	-----, 1-cyanoethyl ester	64
5024	Hydracrylonitrile, carbanilate	67
5026	Lactonitrile, 2-methyl-, carbanilate	67
	Nitro Compounds	
5877	2-Benzoxazolinone, 5,6-dinitro-	88
5477	Carbamic acid, ethyl-, p-nitrophenyl ester	87
3939	-----, methyl ester, 3,3-dinitro-1,5-pentamethylenebis-	47
4670	Carbanilic acid, m-nitro-, isopropyl ester	94
5463	-----, p-nitro-, isopropyl ester	53
3304, 5013	Propanol, 2-methyl-2-nitro-, carbanilate	73, 95

TABLE I

Code No.	Classification and Name	K Value
	CARBAMATES	
	Monosubstituted	
	Miscellaneous	
3353	Carbanilic acid, p-hydroxy-, isopropyl ester	67
3688	-----, 2-mercaptoethyl ester	80
3411	2,4-Oxazolidinedione, 5,5-dimethyl-	61
	Disubstituted	
	Alcohol-Halides	
4749	Carbamic acid, 2,2,3-trichloro-1-hydroxybutyl-, butyl ester	92
5474	-----, 2,2,2-trichloro-1-hydroxyethyl-, isopropyl ester	25
	Ester-Halides	
6044	Carbanilic acid, 5-chloro-2-methyl-, 2-propynyl ester	80
4918	Lactic acid, carbanilate, 2-chloroethyl ester	79
5294	-----, m-chlorocarbanilate, 2-chloroethyl ester	93
5298	cyclohexyl ester	77
	Ether-Halides	
4880	Carbanilic acid, 5-chloro-2-methoxy-, isopropyl ester	83
5255	-----, 2-methoxy-5-methyl-, 2-chloroethyl ester	95
4920	Ethanol, 2-(2,4-dichlorophenoxy)-, carbanilate	67
5256	m-chlorocarbanilate	73
6323	2-Propanol, 1-chloro-3-isopropoxy-, carbanilate	78
	Halide-Nitriles	
4915	Carbanilic acid, m-cyano-, 2-chloroethyl ester	83
6263	Hydracrylonitrile, m-chlorocarbanilate	52
	Phenol-Quinones	
5324	1-Anthraquinonecarbamic acid, 4-hydroxy-, methyl ester	-42
5344	pentyl ester	0
	Miscellaneous	
3631	2(5H)-Furanone, 3,4-dichloro-5-hydroxy-, carbanilate	44
5186	Lactic acid, m-cyanocarbanilate, butyl ester	82
5247	-----, 2-methoxy-5-methylcarbanilate, butyl ester	87
6043	2-Propanol, 1,1,1-trichloro-3-nitro-, carbanilate	88
5195	2-Pyridinecarbamic acid, 5-chloro-, isopropyl ester	55
5918	Urea, 1,1-bis(2-hydroxyethyl)-3-(m-chlorophenyl)-, bis(m-chlorocarbanilate)	36

TABLE I

Code No.	Classification and Name	K Value
	CARBAMATES	
	Polysubstituted	
5936	Lactic acid, m-chlorocarbanilate, 2-(2,4-dichlorophenoxy)ethyl ester	74
5997	-----, m-methylcarbanilate, 2-(2,4-dichlorophenoxy)ethyl ester	48
5293	Propionitrile, 3-(2-hydroxyethoxy)-, m-chlorocarbanilate	63
	CARBOHYDRAZIDES	
5173	Carbohydrazide, 1-carbamoyl-	54
7036	-----, 1,5-diphenyl-	100
	CARBONATES	
5180	Carbonic acid, allyl 4,6-dinitro-o-tolyl ester	98
6805*	-----, cyclic chloromethylethylene ester	97
6807	cyclic 1,2-dichloroethylene ester	77
3569	cyclic ethylene ester	-8
6799	cyclic methylvinylene ester	14
5008	-----, dioctadecyl ester	19
3344	-----, isopropyl 2,4-dichlorophenyl ester	33
3341	pentachlorophenyl ester	90
3342	x,x,x,x-tetrachlorophenyl ester	82
3343	2,4,5-trichlorophenyl ester	32
4713	-----, isopropyl ester, diester with pyrocatechol	76
4712	diester with resorcinol	60
3345, 5439	-----, methyl 2,4,5-trichlorophenyl ester	75, 84
4113	-----, 2,4,5-trichlorophenyl ester, diester with diethylene glycol	-42
	COPPER COMPOUNDS	
3621	Benzoic acid, o-chloro-, copper(II) salt	43
4053	2-Benzimidazolethiol, copper(II) derivative	96
3326	2-Benzothiazolethiol, copper(II) derivative	45
3960	Carbamic acid, bis(2-hydroxyethyl)dithio-, copper(II) salt	90
3952	-----, diethyldithio-, copper(II) salt	50
2990	-----, dimethyldithio-, copper(II) salt	100
3216	-----, ethylenebis[N-(2-cyanoethyl)dithio-, copper(II) salt	29
3578	Cumic acid, copper(II) salt	85
3942	2,4-Hexanedione, copper(II) derivative	86

TABLE I

Code No.	Classification and Name	K Value
	COPPER COMPOUNDS	
3956	4-Morpholinecarbodithioic acid, copper(II) salt	-118
2771	Nicotine, compound with 1/2 f. wt. copper(II) benzoate, monohydrate	98
3001	compound with 1/2 f. wt. copper(II) o-benzoylbenzoate and 1 f. wt. o-benzoylbenzoic acid	94
2763	compound with 1/2 f. wt. copper(II) fumarate, pentahydrate	99
2762	compound with 1 f. wt. copper(II) phthalate and 1 f. wt. phthalic acid, hydrate	100
3004	compound with 1 f. wt. copper(II) thiocyanate	100
3007	compound with 1/2 f. wt. copper(II) thiocyanate and 1 f. wt. thiocyanic acid	100
2757	Oxalic acid, copper(II) hydrogen salt, salt with 1 f. wt. sodium oxalate, dihydrate	80
2758	diamminecopper(II) salt	90
6353	Phthalamic acid, N-isopropyl-, copper(II) salt	72
3627	Phthalic acid, copper(II) salt	73
2756	diamminecopper(II) salt	72
6389	-----, monobutyl ester, copper(II) salt	67
4509	Phenol, pentachloro-, diamminecopper(II) derivative	66
4510	rosinaminecopper(II) derivative	87
6776	8-Quinolinol, 5,7-dichloro-, copper(II) derivative	34
4465	Salicylamide, copper(II) derivative	96
3000	Succinic acid, diamminecopper(II) salt	80
4052	6H-1,3-Thiazine-2-thiol, 4,6,6-trimethyl-, copper(I) derivative	19
6391	o-Toluic acid, α-hydroxy-x-sulfo-, γ-lactone, copper(II) salt	60
	ESTERS, CARBOXYLIC ACIDS	
	Unsubstituted	
	Monobasic Acids	
7210	Acetic acid, o-tolyl ester	46
5204	Benzoic acid, 1-naphthyl ester	7
4815	1,4-Butanediol, dicrotonate	19
6486	Crotonic acid, isopropyl ester	3
5898	Cinnamic acid, methyl ester	29
5900	phenethyl ester	-36
6025	Isoborneol, acetate	47
2702	Lactic acid, acetate, o-tolyl ester	42
5373	2-Propyn-1-ol, hexanoate	73
5218	Stearic acid, vinyl ester	-64
5210	10-Undecenoic acid, cyclohexyl ester	62

TABLE I

Code No.	Classification and Name	K Value
	ESTERS, CARBOXYLIC ACIDS	
	Unsubstituted	
	Polybasic Acids	
5821*	Aconitic acid, triallyl ester	98
5852	Bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, dibutyl ester	80
4107	ditetradecyl ester	-31
6492	Itaconic acid, diallyl ester	98
3751	dimethyl ester	39
2703	-----, diester with allyl lactate	93
6694	Malonic acid, benzylidene-, dimethyl ester	100
4831, 5110	-----, ethylidene-, diethyl ester	86, 99
3396	Octadecanedioic acid, diethyl ester	7
5853	Phthalic acid, diallyl ester	96
3312	di(6-methylheptyl) ester	-6
6978	Sebacic acid, diethyl ester	47
6779	Succinic acid, dibutyl ester	53
6378*	Terephthalic acid, diallyl ester	98
4541, 5366	Tricarballylic acid, triallyl ester	100, 100
	Monosubstituted	
	Acids	
6493	Itaconic acid, β-monoallyl ester	100
6389	Phthalic acid, monobutyl ester, copper(II) salt	67
6388	Succinic acid, x-dodecenyl-, monobutyl ester	84
	Alcohols	
6491	Citric acid, triallyl ester	88
4169	Hydrocinnamic acid, β-ethyl-β-hydroxy-, ethyl ester	54
3275	Lactic acid, dodecyl ester	32
	Amides	
4841	Acetamide, N-2-(1-acetoxy-2-methylpropyl)-	61
4816	-----, N-[2,5-bis(acetoxy)pentyl]-	28
4828	-----, N-bis(ethoxycarbonyl)methyl-	29
4934	-----, N,N'-2,7-(2,7-dimethyloctylene)-bis[2-ethoxycarbonyl-	63
5518	-----, N-(ethoxycarbonylmethyl)-2-mesityl-	49
3441	Acetanilide, p-ethoxycarbonyl-	59
6121	-----, m-hydroxy-, acetate	47
5041	-----, p-hydroxy-, acetate	69
3294	Lactamide, acetate	24
3295	-----, N-butyl-, lauric acid ester	14
4572	-----, N-tert-butyl-, acetate	89

TABLE I

Code No.	Classification and Name	K Value
	ESTERS, CARBOXYLIC ACIDS	
	Monosubstituted	
	Amides	
4118	Lactanilide, α-ethylcaproic acid ester	57
5171, 5483	Oxanilic acid, ethyl ester	58, 41
4677	Palmitamide, N-(2-hydroxyethyl)-, acetate	-2
	Amines	
3857	p-Aminobenzoic acid, butyl ester	46
3387	Anthranilic acid, methyl ester	49
5752	Crotonic acid, 3-(methylamino)-, allyl ester	71
5167	Methacrylic acid, 2-(diethylamino)ethyl ester	77
3268	Oxalic acid, ester with p-(dimethylamino)phenol	71
	Carbamates	
6300	Ethylene glycol, monoacetate, monocarbanilate	61
5184	Hydracrylic acid, carbanilate, butyl ester	73
4900	Lactic acid, carbanilate, benzyl ester	55
5183	-----, 2-methyl-, carbanilate, ethyl ester	71
5916	Mandelic acid, carbanilate, butyl ester	45
	Ethers	
5384	Acetic acid, phenoxy-, 2-phenoxyethyl ester	-57
6294	Cinnamic acid, 3,4-dimethoxy-, methyl ester	52
5205	Eugenyl alcohol, benzoate	16
5905	Ferulic acid, acetate, ethyl ester	14
5904	methyl ester	47
5331	Malonic acid, ethoxymethylene-, diethyl ester	82
	Halides	
4108	Acetic acid, chloro-, pentachlorophenyl ester	88
5509	Acrylic acid, 2-chloro-3-hydroxy-, benzoate, ethyl ester	92
4821	Adipic acid, bis(x-chloroallyl) ester	84
2850	1-Apocamphaneethanol, 2-chloro-, acetate	57
5203	Benzoic acid, p-bromophenyl ester	-109
5209	-----, o-chloro, cyclohexyl ester	72
5206	Benzyl alcohol, 3,4-dichloro-, hexanoate	66
3086	Fumaric acid, bis(2-chloroethyl) ester	79
3111	Maleic acid, chloro-, bis(2-chloroethyl) ester	95
5438*	-----, dichloro-, diallyl ester	98
3230	Phthalic acid, tetrachloro-, diethyl ester	86
5208	10-Undecenoic acid, 2-chloroethyl ester	97

TABLE I

Code No.	Classification and Name	K Value
	ESTERS, CARBOXYLIC ACIDS	
	Monosubstituted	
	Heterocyclic Compounds	
3406	α-Cellobiose, octaacetate	-10
5542	1H-Cyclopenta[b]quinoxaline-1,3-dicarboxylic acid, 2,3-dihydro-, diethyl ester	42
5319, 5774	2-Furanmethanol, diacetate	81, 60
5307, 5781	dibutyrate	68, 66
5780	dipropionate	59
5306	Furfuryl alcohol, acetate	59
5308	butyrate	66
4973	2-Furoic acid, allyl ester	98
4844	butyl ester	60
4972	decyl ester	63
6822	docosyl ester	17
4860, 5215	ethyl ester	48, 38
6820	hexadecyl ester	58
4969	hexyl ester	69
4970	isopentyl ester	67
4964	isopropyl ester	61
4843	methyl ester	79
6821	octadecyl ester	34
4971	octyl ester	64
4848	propyl ester	47
7273	2-Indolecarboxylic acid, ethyl ester	76
5418	Morpholinosuccinic acid, dibutyl ester	44
6278	Octadecanoic acid, 9,10,12,13-diepoxy-, methyl ester	18
6008	7-Oxabicyclo[4.1.0]heptane-2-decanoic acid, 5-butyl-3(and 4)-carboxy-θ, ι-epoxy-, diethyl ester	29
6009	and 7-Oxabicyclo[4.1.0]heptane-2-octanoic acid, 3(and 4)-carboxy-5-(1,2-epoxyhexyl)-, diethyl ester	34
6304	3-Piperidinol, 1-ethyl-, diphenylacetate, hydrochloride	35
6311	ester with α-phenylcyclohexaneacetic acid, hydrochloride	95
6310	-----, 1-methyl-, diphenylacetate, hydrochloride	67
5383	Piperonyl alcohol, α-benzyl-, formate	100
6208	-----, α-tert-butyl-, pivalate	78
4167	Pyran-2-malonic acid, tetrahydro-, diethyl ester	35
7135	3-Pyridineacetic acid, ethyl ester	83
5347	3,5-Pyridinedicarboxylic acid, 2,6-dimethyl-, diethyl ester	61
5346	3,5-Pyrroledicarboxylic acid, 2,4-dimethyl-, diethyl ester	76
5421	Tricarballylic acid, β-morpholino-, triallyl ester	98
5417	triethyl ester	32

TABLE I

Code No.	Classification and Name	K Value
	ESTERS, CARBOXYLIC ACIDS	
	Monosubstituted	
	Hydrazines and Derivatives	
5796*	Acetic acid, hydrazino-, methyl ester, hydrochloride	95
4898	Carbazic acid, 3-methyl-3-phenyl-, isopropyl ester	98
4365, 5484	-----, 3-phenyl-, isopropyl ester	96, 68
	Imides	
7009	Maleimide, N-acetoxymethyl-	95
6737*	-----, N-propionyloxymethyl-	98
4731	Phthalimide, N-2-hydroxyethyl-, oleate	8
4732	stearate	-116
5108	Succinimide, N-(2-acetoxyethyl)-	50
4730	-----, N-(2-hydroxy-1,1-dimethylethyl)-, oleate	66
	Ketones	
5106	Acetoacetic acid, allyl ester	90
4884	1,3-Cyclopentanedicarboxylic acid, 4,5-dioxo-, diethyl ester	57
2907	Hydratropic acid, β-(4-biphenylcarbonyl)-, methyl ester	50
3311	Pimelic acid, γ-oxo-, dibutyl ester	31
3308	didodecyl ester	-58
3310	diethyl ester	42
3309	dimethyl ester	24
6439	Pinonic acid, dodecyl ester	-20
	Lactams	
4936	3-Pyrazolecarboxylic acid, 5-oxo-, ethyl ester	55
4018	4-Pyridazineacetic acid, 1,2,3,6-tetrahydro-3,6-dioxo-2-phenyl-, ethyl ester	13
	Lactones	
3470	Acetic acid, phthalidylidene-, ethyl ester	-4
2791	α-Conidendrol, tetraacetate	64
2793	tetrabenzoate	10
2792	β-Conidendrol, tetraacetate	30
3775	Coumalic acid, methyl ester	97
	Nitriles	
4842	Acrylic acid, 2-cyano-3-phenyl-, ethyl ester	78
3738, 4852 5906	Cinnamic acid, α-cyano-, ethyl ester	53, 66 41
3755	Cinnamyl alcohol, cyanoacetate	4
3211	Fumaric acid, di(2-cyanoethyl) ester	67

TABLE I

Code No.	Classification and Name	K Value
	ESTERS, CARBOXYLIC ACIDS	
	Monosubstituted	
	Nitriles	
4928	3-Pentenenitrile, 2-hydroxy-, acetate	63
4480	Pimelic acid, γ,γ-dicyano-, diallyl ester	100
4832	Propionitrile, 2-hydroxy-3-methyl-, acetate	6
4829*, 5116		100, 100
6443*	Tartronitrile, methyl-, acetate	99
	Nitro Compounds	
4404	Benzoic acid, p-nitro-, p-nitrophenyl ester	39
4405	m-tolyl ester	91
6301	Cinnamic acid, m-nitro-, ethyl ester	45
5907	-----, p-nitro-, methyl ester	54
3947	o-Cresol, 4,6-dinitro-, acetate	97
	Quaternary Nitrogen Compounds	
	Ammonium compounds.	
3357	benzyl(carboxymethyl)dimethyl----- chloride, tetradecyl ester	94
5419	pentamethylenebis[(2-hydroxyethyl)dimethyl- ----- iodide, diacetate	53
	Piperidinium compounds.	
3356	1-carboxymethyl-1-methyl----- chloride, tetradecyl ester	93
	Sulfides	
4717	Propionic acid, 3,3'-thiodi-, bis(1-methyl- heptyl) ester	55
4716	dibutyl ester	65
4715	diethyl ester	65
	Sulfones	
3293	Benzoic acid, p,p'-sulfonyldi-, dibutyl ester	-22
5046	Phenol, 4,4'-sulfonyldi-, diacetate	62
	Thiocarbamates	
5142	Acetic acid, dibutyldithiocarbamoyl-, ethyl ester	84
5140	-----, diethyldithiocarbamoyl-, ethyl ester	90
5141	-----, dimethyldithiocarbamoyl-, butyl ester	92
5143	ethyl ester	65
	Thiocyanates	
5674	Acetic acid, thiocyanato-, 1,3-dimethylbutyl ester	93
5668	Benzoic acid, thiocyanatomethyl ester	99
5663	Dodecanoic acid, thiocyanatoethyl ester	75

TABLE I

Code No.	Classification and Name	K Value
	ESTERS, CARBOXYLIC ACIDS	
	Monosubstituted	
	Thiocyanates	
5673	Octanoic acid, 2-thiocyanatoethyl ester	83
5672	Propionic acid, 3-thiocyanato-, ethyl ester	65
5671	methyl ester	77
	Thioureas	
3467	Acetic acid, (5-pseudothiohydantoinyl)-, 2-ethylhexyl ester	25
5634	Pseudourea, 2-ethoxycarbonyl-2-thio-, picrate	98
3707	4-Thiazolecarboxylic acid, 2-amino-, ethyl ester	55
	Ureas	
6747	Fumaramic acid, N-carbamoyl-, methyl ester	82
6746	Maleamic acid, N-carbamoyl-, dodecyl ester	19
6742	methyl ester	84
6749	-----, N-(tert-butylcarbamoyl)-, isopropyl ester	87
6748	methyl ester	79
	Miscellaneous	
5929	Acetoacetic acid, thiosemicarbazone, ethyl ester	100
3263	Caproic acid, α-oxo-, oxime, ethyl ester	86
6295	Gentisic acid, x-tert-butyl-, propyl ester	84
3246	Tartaric anhydride, diacetate	11
	Disubstituted	
	Amide-Halides	
4414	Oxanilic acid, 4'-chloro-, ethyl ester	73
5931	-----, 3'-chloro-, isopropyl ester	35
	Amide-Nitriles	
5335	Acrylic acid, 3-(p-acetamidophenyl)-2-cyano-, ethyl ester	-15
5515	Phenaceturic acid, α-cyano-, ethyl ester	59
	Carbamate-Halides	
6044	Carbanilic acid, 5-chloro-2-methyl-, 2-propynyl ester	80
4918	Lactic acid, carbanilate, 2-chloroethyl ester	79
5294	-----, m-chlorocarbanilate, 2-chloroethyl ester	93
5298	cyclohexyl ester	77

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Code No.	Classification and Name	K Value
	ESTERS, CARBOXYLIC ACIDS	
	Disubstituted	
	Ether-Halides	
5201	Benzoic acid, o-ethoxy-, p-chlorophenyl ester	75
6296	Cinnamic acid, α-bromo-3,4-dimethoxy-, methyl ester	51
3103	Fumaric acid, bis[2-(2-chloroethoxy)ethyl] ester	57
6299	Hydrocinnamic acid, α-bromo-β,3,4-trimethoxy-, methyl ester	24
6297	-----, α,β-dibromo-3,4-dimethoxy-, methyl ester	26
3110	Maleic acid, bis[2-(2-chloroethoxy)ethyl] ester	81
3030	1,2-Propanediol, 3-pentachlorophenoxy-, diacetate	83
5207	Propanol, 3-(3-phenoxypropoxy)-, bromoacetate	84
	Ether-Lactones	
2789	α-Conidendrin, diacetate	41
2790	β-Conidendrin, diacetate	20
	Ether-Phenols	
5903	Ferulic acid, ethyl ester	29
5902	methyl ester	30
	Halide-Heterocyclic Compounds	
6521*	2-Furoic acid, 2-chloroethyl ester	95
7168	-----, 3,4-dichloro-, ethyl ester	78
4846	-----, 2,3,4,5-tetrachlorotetrahydro-, butyl ester	100
6827	2-chloroethyl ester	100
6826	docosyl ester	10
6823	dodecyl ester	99
4859	ethyl ester	97
6824	hexadecyl ester	95
4845	methyl ester	100
6825	octadecyl ester	97
5162, 5386	octyl ester	100, 100
4847	propyl ester	100
5202	Piperonyl alcohol, p-chlorobenzoate	-47
	Halide-Hydrazines	
4374	Carbazic acid, 2-(2,5-dichlorophenyl)-, isopropyl ester	58
4914	-----, 3-phenyl-, 2-chloroethyl ester	52
5554	-----, 3-(2,4,6-trichlorophenyl)-, isopropyl ester	90
	Halide-Ketones	
3088	Acetophenone, 2-bromo-3'-hydroxy-, benzoate	47
3089	-----, 2-bromo-4'-hydroxy-, benzoate	59

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Code No.	Classification and Name	K Value
	ESTERS, CARBOXYLIC ACIDS	
	Disubstituted	
	Halide-Nitro Compounds	
4903	Benzoic acid, 2,4-dichloro-, o-nitrophenyl ester	18
4460	-----, p-nitro-, p-chlorophenyl ester	23
4878	Phenol, 2,3,5,6-tetrachloro-4-nitro-, acetate	87
	Halide-Sulfides	
4753	Acetic acid, chloro-, diester with 4,4'-thiodiphenol	90
5146	-----, pentachlorophenylthio-, methyl ester	80
	Halide-Thiocarbamates	
5145	Acetic acid, dibutyldithiocarbamoyl-, p-chlorophenyl ester	72
5144	-----, diethyldithiocarbamoyl-, p-chlorophenyl ester	100
5444	Carbamic acid, dithio-, ethylenebis-S,S'-bis(2-bromoethoxycarbonyl)	83
	Heterocyclic-Nitro Compounds	
4007, 5787	2-Furanmethanediol, 5-nitro-, diacetate	57, 72
5804	dipropionate	86
4006, 5790	Furfuryl alcohol, 5-nitro-, acetate	85, 86
4662	-----, tetrahydro-, p-nitrobenzoate	89
4967	2-Furoic acid, 5-nitro-, ethyl ester	100
5792, 6828	methyl ester	92, 97
5785, 6829	propyl ester	94, 99
4664	2-Pyridineethanol, m-nitrobenzoate	80
	Sulfonic Acid-Ureas	
6757	Succinamic acid, N-(tert-butylcarbamoyl)-2(or 3)-sulfo-, sodium salt, dodecyl ester	56
6756	isopropyl ester	43
6755	methyl ester	66
6754	-----, N-carbamoyl-2(or 3)-sulfo-, sodium salt, dodecyl ester	-16
6753	methyl ester	-27
	Miscellaneous	
4407	Acetoacetic acid, α,α-bis(2-cyanoethyl)-, methyl ester	63
2890	-----, α-[bis[p-(dimethylamino)phenyl]methyl]-, ethyl ester	32
5910	Acetonitrile, (4-hydroxy-3-methoxyphenyl)-, acetate	33
5343	Acrylic acid, 3-(m-chloroanilino)-2-(ethoxycarbonyl)-, ethyl ester	46

TABLE I

Code No.	Classification and Name	K Value
	ESTERS, CARBOXYLIC ACIDS	
	Disubstituted	
	Miscellaneous	
6623	Benzoic acid, p-amidino-, ethyl ester, hydrochloride	79
6699	-----, 3,5-bis[(dimethylamino)methyl]-4-hydroxy-, methyl ester	60
5878	-----, p-[bis(2-hydroxyethyl)amino]-, ethyl ester	43
6477	2H-1-Benzopyran-3-carboxylic acid, 8-allyl-2-oxo-, 2-(dibenzylamino)ethyl ester, hydrochloride	58
5525	Cinnamic acid, 4-acetoxy-3-methoxy-	31
5543	1,3-Cyclopentanedicarboxylic acid, 4-(phenylamino)-5-oxo-, diethyl ester	41
5561	Ethanol, 2,2'-dithiodi-, bis(p-nitrobenzoate)	27
6743	Fumaramic acid, N-carbamoyl-, 2-chloroethyl ester	65
6744	2-nitrobutyl ester	57
5779	2-Furanacrylic acid, cis/trans-α-acetyl-, ethyl ester	94
3804	-----, α-cyano-, ethyl ester	62
4096	2-Imidazolineethanol, with 2-decyl and 2-dodecyl acetates	90
5186	Lactic acid, m-cyanocarbanilate, butyl ester	82
5247	-----, 2-methoxy-5-methylcarbanilate, butyl ester	87
6758	Maleamic acid, N-carbamoyl-, 2-hydroxyethyl ester	52
6745	2-(p-octylphenoxy)ethyl ester	74
5516	Malonic acid, (2-phenylacetamido)-, monoethyl ester, sodium salt	45
5370	Mandelic acid, 2-chloroethyl ester	80
	Piperidinium compounds.	
6302	1-ethyl-3-hydroxy-1-methyl----- bromide, benzilic acid ester	86
5036	5-Pyrimidinecarboxylic acid, 1,2,3,4-tetrahydro-4-oxo-2-thioxo-, ethyl ester	88
3351	Pyruvic acid, (p-nitrophenyl)-, methyl ester	1
7272	Salicylic acid, 5-nitro-, ethyl ester	44
3743	-----, 2-thenyl ester	59
	Polysubstituted	
3970	Acetic acid, diethyldithiocarbamoyl-, 2-(pentachlorophenoxy)ethyl ester	97
3965	-----, thiocyanato-, 2-(pentachlorophenoxy)-ethyl ester	85
4119	Acetoacetic acid, 2-(2,2,2-trichloro-1-hydroxy-aminoethyl)-, ethyl ester	45
5301	Furfuryl alcohol, 5-nitro-, bromoacetate	89
2754	chloroacetate	70
5300	p-chlorobenzoate	30

TABLE I

Code No.	Classification and Name	K Value
	ESTERS, CARBOXYLIC ACIDS	
	Polysubstituted	
5302	Furfuryl alcohol, 5-nitro-, x-chloropropionate	78
6298	Hydracrylic acid, 2-bromo-3-(3,4-dimethoxyphenyl)-, methyl ester	9
5936	Lactic acid, m-chlorocarbanilate, 2-(2,4-dichlorophenoxy)ethyl ester	74
5997	-----, m-methylcarbanilate, 2-(2,4-dichlorophenoxy)ethyl ester	48
3969	Morpholinocarbodithioic acid, ester with 2-(pentachlorophenoxy)ethyl mercaptoacetate	78
3984	3-Quinolinecarboxylic acid, 8-chloro-4-hydroxy-7-methyl-, ethyl ester	28
6472	Salicylic acid, 5-bromo-3-phenyl-, 2-(diisopropylamino)ethyl ester, hydrochloride	71
6487	-----, 5-iodo-3-phenyl-, 2-(diisopropylamino)-ethyl ester, hydrochloride	65
	ETHERS	
	Unsubstituted	
7205	Anisole, p-methyl-	71
3142	Benzene, p-bis(allyloxy)-	93
2904	-----, p-dibutoxy-	-31
2902	-----, p-diethoxy-	46
2901	-----, p-dimethoxy-	43
2841	Ethane, 1,2-bis(2-biphenylyloxy)-	20
3072	-----, 1,2-diphenoxy-	40
4158	Ether, bis(diphenylmethyl)	22
3384	-----, p-tert-butylphenyl phenyl	24
4195	-----, phenyl	97
7207	Veratrole	58
	Monosubstituted	
	Acid Anhydrides	
3378	Hemipic anhydride	-52
6771	Succinic anhydride, p-methoxybenzyl-	-36
	Acids	
4540	Acetic acid, [o-(1-butenyl)phenoxy]-	95
3399	-----, 2,3-dimethoxytetramethylenebis-, mercury(II) salt	100

TABLE I

Code No.	Classification and Name	K Value
	ETHERS	
	Monosubstituted	
	Acids	
6816	2-Biphenylcarboxylic acid, 2'-methoxy-	37
6360	Cinnamic acid, 3,4-dimethoxy-	42
5492	-----, 4-methoxy-	-36
5502	-----, 2-methoxy-α-methyl-	47
5163	Propionic acid, 2-benzyloxy-	72
3380	-----, 2-(p-tert-butylphenoxy)-	81
2831	-----, 2-phenoxy-	61
3335	Veratric acid	20
	Alcohols	
7204	Benzyl alcohol, p-methoxy-	80
4474	Ethanol, 2-(2-biphenylyloxy)-	52
4709	-----, 2,2'-[isopropylidenebis(p-phenyleneoxy)]di-	59
3943	-----, 2-(x,x-xylyloxy)-	76
2837	1-Propanol, 3-(1-naphthyloxy)-	73
2839	2-Propanol, 1-(4-biphenylyloxy)-	-48
3381	-----, 1-(p-tert-butylphenoxy)-	59
3709	-----, 1-(p-cyclohexylphenoxy)-	39
	Aldehydes	
7209	Benzaldehyde, o-methoxy-	55
3249	Glutaraldehyde, α-methoxymethyl-α,γ-dimethyl-	36
3252	1-Naphthaldehyde, 2-ethoxy-	-1
	Amides	
6124	Acetanilide, 2',5'-diethoxy-	68
6123	-----, 2',5'-dimethoxy-	53
4999	Anisamide, N-allyl-	95
6102	-----, N-benzyl-	57
6103	-----, N-cyclohexyl-	50
6100	-----, N,N-diethyl-	84
6101	-----, N,N-diisopropyl-	79
4987	-----, N-ethyl-	75
4997	-----, N-isobutyl-	80
4990	-----, N-isopropyl-	96
4988	-----, N-methyl-	74
4989	-----, N-propyl-	88
6104	Anisanilide	38
5005	p-Anisanisidide	-39
6189	Benzamide, N-benzyl-o-ethoxy-	78
6220	-----, N-benzyl-p-ethoxy-	5
6185	-----, N-butyl-o-ethoxy-	76
6215	-----, N-butyl-p-ethoxy-	75

TABLE I

Code No.	Classification and Name	K Value
	ETHERS	
	Monosubstituted	
	Amides	
6193	Benzamide, N-sec-butyl-o-ethoxy-	84
6218	-----, N-sec-butyl-p-ethoxy-	45
6203	-----, N-cyclohexyl-o-ethoxy-	50
6219	-----, N-cyclohexyl-p-ethoxy-	38
6194	-----, N,N-dibenzyl-o-ethoxy-	28
6188	-----, N,N-dibutyl-o-ethoxy-	85
6216	-----, N,N-dibutyl-p-ethoxy-	83
6207	-----, N,N-dicyclohexyl-o-ethoxy-	83
7140	-----, o-ethoxy-	80
6213	-----, p-ethoxy-N,N-diethyl-	63
4798	-----, 2-ethoxy-x,x-diethyl-	74
6192	-----, o-ethoxy-N,N-diisopropyl-	51
6210	-----, p-ethoxy-N,N-dimethyl-	60
6222	-----, p-ethoxy-N,N-dipentyl-	77
6187	-----, o-ethoxy-N,N-dipropyl-	82
6214	-----, p-ethoxy-N,N-dipropyl-	79
6191	-----, o-ethoxy-N-isobutyl-	88
6217	-----, p-ethoxy-N-isobutyl-	61
6195	-----, o-ethoxy-N-isopropyl-	58
6211	-----, p-ethoxy-N-methyl	30
6221	-----, p-ethoxy-N-pentyl-	51
6190	-----, o-ethoxy-N-propyl-	90
6212	-----, p-ethoxy-N-propyl-	55
6205	Benzanilide, N-butyl-2-ethoxy-	88
6206	-----, 2-ethoxy-N-ethyl	39
6204	-----, 2-ethoxy-N-methyl-	28
5006	o-Benzanisidide, 4-methoxy-	38
5001	m-Benzotoluidide, 4-methoxy-	71
5002	o-Benzotoluidide, 4-methoxy-	21
5003	p-Benzotoluidide, 4-methoxy-	27
5073	o-Butyranisidide	100
6155	p-Butyranisidide	64
6157	o-Butyrophenetidide	56
4758, 6156	p-Butyrophenetidide	58, 32
5426	Decanediamide, N,N-bis(3,4-dimethoxyphenyl)-	42
6183	p-Formanisidide	52
6184	o-Formophenetidide	59
5961	Phthalamide, N,N'-bis(p-methoxyphenyl)-	81
4991	Piperidine, 1-(p-anisoyl)-	94

TABLE I

Code No.	Classification and Name	K Value
	ETHERS	
	Monosubstituted	
	Amines	
4545	Allylamine, 2(or 3)-allyloxy-N,N-dimethyl-	83
6227	Aniline, 2,5-dimethoxy-	89
4564	-----, p-hexyloxy-, benzenesulfonate	97
4183	-----, 4,4'-(p-methoxy)benzylidenebis[N,N-dimethyl-	83
3574	-----, 4,4'-oxydi-	32
3575	-----, N-(2-phenoxyethyl)-	66
5955	o-Anisidine, hydrochloride	71
4237	Benzidine, 3,3'-dimethoxy-	96
3444	Benzylamine, N-(2,5-dimethoxyphenyl)-	1
7270	Bis(p-methoxyphenethyl)amine, phosphate	64
3094	Butylamine, 4-phenoxy-	87
4893	Dibenzylamine, N-[2-(x,x-diisopropyl-m-tolyloxy)-ethyl]-	75
4894	-----, N-[2-(x,x-diisopropyl-o-tolyloxy)ethyl]-	62
6062	Dodecylamine, N-(p-methoxybenzyl)-, hydrochloride	83
7160*	Ethane, 1,2-bis[p-[(hexylmethylamino)methyl]-phenoxy]-, dihydrochloride	96
7196*	Hexane, 1,6-bis[p-[(isopropylamino)methyl]phenoxy]-, dihydrochloride, 1 percent	100
7158	Propane, 1,3-bis[4-[(methylphenethylamino)methyl]-phenoxy]-, dihydrochloride	99
	Carbamates	
4679	4,4'-Bicarbanilic acid, 3,3'-dimethoxy-, diiso-propyl ester	48
4371	Carbanilic acid, 2,5-diethoxy-, isopropyl ester	61
4875	-----, 2,4-dimethoxy-, isopropyl ester	69
4368	-----, m-ethoxy-, isopropyl ester	65
4671	-----, m-methoxy-, isopropyl ester	79
5286	2-Propanol, 1-phenoxy-, carbanilate	48
	Esters	
5384	Acetic acid, phenoxy-, 2-phenoxyethyl ester	-57
6294	Cinnamic acid, 3,4-dimethoxy-, methyl ester	52
5205	Eugenyl alcohol, benzoate	16
5905	Ferulic acid, acetate, ethyl ester	14
5904	methyl ester	47
5331	Malonic acid, ethoxymethylene-, diethyl ester	82
	Halides	
3027	Anisole, 2,3,4,5,6-pentachloro-	87
4868	-----, 2,4,5-trichloro-	81

TABLE I

Code No.	Classification and Name	K Value
	ETHERS	
	Monosubstituted	
	Halides	
3102	Ethane, 1-(2-biphenylyloxy)-2-(2-chloroethoxy)-	49
4383	-----, 2,2-bis(3,5-dichloro-2-methoxyphenyl)-1,1,1-trichloro-	29
2976	-----, 2,2-bis(p-ethoxyphenyl)-1,1,1-trichloro-	32
3104	Ether, benzyl 2-chloroethyl	75
3105	-----, bis(2-bromoethyl)	86
2846, 4207	-----, bis(p-bromophenyl)	51, 85
4871	-----, butyl 2,3,5,6-tetrachlorophenyl	79
4141	Methane, bis(p-chlorophenoxy)-	61
3107	Naphthalene, 2-(2-chloroethoxy)-	69
2844, 4218	Phenetole, β-chloro-	92, 68
7206	-----, p-chloro-	65
2851	-----, β-chloro-o-phenyl-	70
	Heterocyclic Compounds	
4343*	Benzene, p-bis(2,3-epoxypropoxy)-	91
4344*	-----, 2-tert-butyl-1,4-bis(2,3-epoxypropoxy)-	95
4345	-----, 1,4-di-tert-butyl-2,5-bis(2,3-epoxypropoxy)-	60
5305	Ether, ethyl furfuryl	60
5309	-----, furfuryl methyl	31
6440	2,5-Methano-2H-oxireno[a]indene, 4,4'-[oxybis-(ethyleneoxy)]bis[octahydro-	59
7266	2-Pipecoline, 1-(3,4-dimethoxybenzyl)-, hydrochloride	81
7262	-----, 1-(2-methoxy-5-methylbenzyl)-, hydrochloride	78
3079	Propane, 1-(2-biphenylyloxy)-2,3-epoxy-	64
4801	2H-Pyran, 3,4-dihydro-2-isobutoxy-4-methyl-	20
6651	Quinoline, 2-(p-methoxyphenethyl)-	71
6652	-----, 4-(p-methoxyphenethyl)-	74
6653	-----, 6-methoxy-2-(p-methoxyphenethyl)-	66
2760	-----, 8-phenylmercurioxy-	83
6628	-----, 1,2,3,4-tetrahydro-6-methoxy-1-(10-piperidinodecyl)-	91
6627	-----, 1,2,3,4-tetrahydro-6-methoxy-1-(9-piperidinononyl)-	97
	Hydrazides	
5000	Anisic acid, phenylhydrazide	-40
7101	Benzenesulfonic acid, isopropylidenehydrazide, p,p'-oxybis-	87

TABLE I

Code No.	Classification and Name	K Value
	ETHERS	
	Monosubstituted	
	Imides	
6357	Pyromellitic acid, diimide, N,N'-bis(m-ethoxyphenyl)-	-7
6358, 6359	-----, diimide, N,N'-bis(p-ethoxyphenyl)-	39, -16
6355	-----, diimide, N,N'-bis(m-methoxyphenyl)-	-36
6354	-----, diimide, N,N'-bis(o-methoxyphenyl)-	-11
6356	-----, diimide, N,N'-bis(p-methoxyphenyl)-	-59
	Ketones	
6003	3-Buten-2-one, 4-(p-methoxyphenyl)-	50
5274	Chalcone, α-ethyl-4,4'-dimethoxy-	98
2735	-----, 2-methoxy-	67
3074	-----, 4'-methoxy-	28
4164	2-Cyclohexen-1-one, 3-ethoxy-5,5-dimethyl-	64
4358	Cyclopentanone, 2,5-bis(p-methoxybenzylidene)-	32
5524	Propiophenone, 3',4'-dimethoxy-	83
4170	-----, 4'-methoxy-3-phenyl-	8
	Lactones	
3767	1,3-Benzodioxan, 8-methoxy-2-methyl-4-oxo-	39
3435	Coumarin, 6-methoxy-4-methyl-	-5
2787	2-Naphthoic acid, 4-(3,4-dimethoxyphenyl)-1,2,3,4-tetrahydro-3-(hydroxymethyl)-6,7-dimethoxy-, γ-lactone (from α-conidendrin)	38
2788	γ-lactone (from β-conidendrin)	40
	Nitriles	
6017	Acetonitrile, (3,4-dimethoxyphenyl)-	77
5102	Butyronitrile, 2-phenoxy-	64
7076	Malononitrile, 3,4-diethoxybenzylidene-	94
3205	-----, 1-(p-ethoxyphenyl)ethylidene-	88
5081	Propionitrile, 3-(x-nonylphenoxy)-, branched C_9	93
5082	-----, 3-(p-tolyloxy)-	79
	Nitro Compounds	
4980	Anisole, 5-allyl-2-(2,4-dinitrophenoxy)-	53
3887	-----, 3,5-dinitro-	78
3816	-----, o-(2-nitrovinyl)-	95
4765	Benzene, 1-allyl-4-(2,4-dinitrophenoxy)-3-methoxy-	44
4766	-----, p-bis(2,4-dinitrophenoxy)-	46
4085	1-Butene, 1-(p-methoxyphenyl)-2-nitro-	75

TABLE I

Code No.	Classification and Name	K Value
	ETHERS	
	Monosubstituted	
	Nitro Compounds	
4977	Ether, benzyl 2,4-dinitrophenyl	96
4767	-----, 2-biphenylyl 2,4-dinitrophenyl	52
4768	-----, 4-biphenylyl 2,4-dinitrophenyl	60
4978	-----, cyclohexyl 2,4-dinitrophenyl	94
4769	-----, 2-cyclohexyl-4,6-dinitrophenyl 2,4-dinitrophenyl	75
4508	-----, o-cyclohexylphenyl 2,4-dinitrophenyl	75
4421	-----, 2,4-dinitrophenyl m-nitrophenyl	80
4422	-----, 2,4-dinitrophenyl 2-nitro-p-tolyl	64
7208	-----, o-nitrophenyl phenyl	96
4426	Naphthalene, 1,5-bis(2,4-dinitrophenoxy)-	36
7147*	Styrene, 3,4-dimethoxy-β-nitro-	86
7149*	Veratrole, 4-(2-nitropropenyl)-	97
	Quaternary Nitrogen Compounds	
	Ammonium compounds.	
4718	benzyldimethyl[2-[2-[p-(1,1,3,3-tetramethylbutyl)-phenoxy]ethoxy]ethyl]----- thiocyanate	98
6566	ethyldimethyl[2-[2-(p-octylphenoxy)ethoxy]-ethyl]----- 1-dodecanesulfonate	82
4331	trimethyl[2-[2-[x-(1,1,3,3-tetramethylbutyl)-phenoxy]ethoxy]ethyl]----- bromide	89
4333	Glycine, [2-[2-[p-(1,1,3,3-tetramethylbutyl)phenoxy]-ethoxy]ethyl]betaine	60
	Quinones	
4131	p-Benzoquinone, p-ethoxyphenyl-	52
3127	1,4-Naphthoquinone, 2-methoxy-	85
	Thiocarbamates	
3968	Carbamic acid, diethyldithio-, diester with 2,2'-oxydiethanethiol	95
7091	-----, dimethyldithio-, 2-(p-tolyloxy)ethyl ester	49
3967	4-Morpholinecarbodithioic acid, diester with 2,2'-oxydiethanethiol	63
	Thiocyanates	
5675	Ethane, 1,2-bis(2-thiocyanatoethoxy)-	96
3959, 5661	Ether, bis(2-thiocyanatoethyl)	51, 89
5662*	-----, 2-butoxyethyl 2-thiocyanatoethyl	98
5664	-----, 2-(p-octylphenoxy)ethyl 2-thiocyanatoethyl	85
3797	-----, phenyl 2-thiocyanatoethyl	79

TABLE I

Code No.	Classification and Name	K Value
	ETHERS	
	Monosubstituted	
	Thioureas	
5123, 5396	Benzothiazole, 2-amino-5,6-dimethoxy-	100, 100
3366	-----, 2-(p-methoxyanilino)-	10
5654	Ether, bis[2-[(1-propionyl-2-imidazolin-2-yl)thio]-ethyl]	70
4750	2-Imidazoline, 2,2'-ethylenebis(oxyethylenethio)di-, dihydrochloride	71
5431	-----, 1-(methoxymethyl)-2-(methoxymethylthio)-	50
5657	-----, 2-[[2-[2-(p-octylphenoxy)ethoxy]ethyl]thio]-, hydrochloride	85
5656	-----, 2-[[2-(2-phenoxyethoxy)ethyl]thio]-	76
5707	Pseudourea, 1,2-dimethyl-2-thio-1-(2-vinyloxy-ethyl)-, hydroiodide	99
4748	-----, 2-[2-[p-(1,1,3,3-tetramethylbutyl)phenoxy]-ethyl]-2-thio-, hydrobromide	100
	Ureas	
4300	Carbanilide, 2-methoxy-	45
4476	2-Imidazolidone, 1,3-bis(methoxymethyl)-	21
4479	1,3,5,4H-Oxadiazin-4-one, 3,5-bis(butoxymethyl)-tetrahydro-	75
3271	Urea, (3-chloromercuri-2-methoxypropyl)-	69
	Miscellaneous	
3886	p-Anisaldehyde, oxime	81
5818	-----, thiosemicarbazone	76
3137	Benzenesulfonamide, 2,5-dimethoxy-	81
5221	Phenol, 2,6-dimethoxy-4-propenyl-	92
	Disubstituted	
	Acid-Halides	
3325	Acetic acid, (4-chloro-o-tolyoxy)-	89
3291	-----, (2,4-dichlorophenoxy)-, nickel(II) salt	42
3029	-----, (pentachlorophenoxy)-	97
5010	-----, (2,3,5,6-tetrachlorophenoxy)-	88
4189	Propionic acid, α-(o-chlorophenoxy)-	19
	Alcohol-Amines	
6622	1-Naphthalenemethanol, α-(2-dibutylamino-1,1-dimethylethyl)-4-methoxy-, hydrochloride	94
6538	-----, α-(dibutylaminomethyl)-2-methoxy-, hydrochloride	92

TABLE I

Code No.	Classification and Name	K Value
	ETHERS	
	Disubstituted	
	Alcohol-Amines	
6658	1-Naphthalenemethanol, α-(dipentylaminomethyl)-2-methoxy-, hydrochloride	96
6536	9-Phenanthrenemethanol, α-(N-butyl-p-methoxyanilinomethyl)-1,2,3,4-tetrahydro-, hydrochloride	85
	Alcohol-Halides	
3944	Ethanol, 2-(pentachlorophenoxy)-	94
6441	1,2-Propanediol, 3-(p-chlorophenoxy)-	65
3386	2-Propanol, 1-(p-chlorophenoxy)-	64
	Alcohol-Quaternary Nitrogen Compounds	
	Ammonium compounds.	
4334	benzyl(2-hydroxyethyl)methyl[2-[2-[x-(1,1,3,3-tetramethylbutyl)phenoxy]ethoxy]ethyl]----- chloride	97
	Morpholinium compounds.	
3950	4,4'-oxydiethylenebis[4-(2-hydroxyethyl)----- chloride	-77
	Amide-Amines	
4940	Acetamide, 2-(6-methoxy-m-toluidino)-	74
4838*	p-Acetanisidide, 2'-amino-	97
	Amide-Halides	
3576	Acetamide, 2-(2,4-dichlorophenoxy)-	89
4912	Acetanilide, 3'-chloro-2-(pentachlorophenoxy)-	18
6131	o-Acetanisidide, 5'-chloro-	53
5039	p-Anisanilide, 4'-bromo-	50
4783, 4992	-----, 2'-chloro-	70, 21
4784, 4993	-----, 3'-chloro-	55, 53
4785, 4994	-----, 4'-chloro-	35, 59
4782, 4995	-----, 2',5'-dichloro-	-31, 51
6200	Benzanilide, 2'-bromo-2-ethoxy-	2
6201	-----, 4'-bromo-2-ethoxy-	-8
6197	-----, 2'-chloro-2-ethoxy-	-38
6198	-----, 3'-chloro-2-ethoxy-	-44
6199	-----, 4'-chloro-2-ethoxy-	-185
6202	-----, 2',5'-dichloro-2-ethoxy-	72
4438	o-Benzanisidide, 2,4-dichloro-	33
4453	p-Benzanisidide, 2-chloro-	82
4439	-----, 2,4-dichloro-	54
4911	-----, 3,4-dichloro-	15

TABLE I

Code No.	Classification and Name	K Value
	ETHERS	
	Disubstituted	
	Amide-Nitro Compounds	
4762, 4996	p-Anisanilide, 2'-nitro-	92, 89
4998	-----, 4'-nitro-	64
5972	Phthalamide, N,N'-bis(p-methoxyphenyl)-3-nitro-	44
	Amide-Phenols	
5943	m-Anisamide, 6-hydroxy-N-methyl-	27
6253	Salicylo-p-phenetidide	25
	Amine-Halides	
4562	Aniline, 3-chloro-4-(p-chlorophenoxy)-, hydrochloride	96
4681	Triethylamine, 2-pentachlorophenoxy-	96
	Amine-Heterocyclic Compounds	
6230	Doxylamine, succinate	91
6225	Lepidine, 8-[[2-(diethylamino)ethyl]amino]-6-methoxy-, dihydrochloride	95
6226	-----, 6-methoxy-8-[[1-methyl-4-(propylamino)-butyl]amino]-, dihydrochloride	87
6280	Quinoline, 8-[(3-aminopropyl)amino]-6-methoxy-, dihydrochloride	90
3995	-----, 8-amino-6-methoxy-, monohydrochloride	81
6387	-----, 8-[6-[(4-benzylpiperazin-1-yl)hexyl]-amino]-6-methoxy-, dioxalate	93
6283	-----, 8-[[6-(diallylamino)hexyl]amino]-6-methoxy-	96
6285	-----, 8-[[5-(isopropylamino)pentyl]amino]-6-methoxy-3,4-dimethyl-, dihydrobromide	97
6282	-----, 6-methoxy-8-[[5-[(1-methylbutyl)amino]-pentyl]amino]-, monohydrochloride	95
5616	s-Triazine, 2,6-diamino-4-[1-(butoxy)ethyl]methyl-	60
5601*	-----, 2,6-diamino-4-[1-[1-(ethoxy)ethoxy]cyclohexyl]-	93
	Amine-Imides	
5261	Phthalimide, N-[(p-ethoxyanilino)methyl]-	-7
5268	-----, N-[(p-methoxyanilino)methyl]-	71
	Amine-Nitriles	
4362	Acetonitrile, 2-(o-anisidino)-	100
5087	Propionitrile, 3-(o-anisidino)-	93
5088	-----, 3-(p-phenetidino)-	83

TABLE I

Code No.	Classification and Name	K Value
	ETHERS	
	Disubstituted	
	Amine-Nitro Compounds	
3885	p-Anisidine, 2,6-dinitro-	74
4369	o-Anisidine, N-(2,4-dinitrophenyl)-	72
4669	Dibenzylamine, N-[2-(2,4-dinitrophenoxy)ethyl]-	84
5279	p-Phenetidine, 2-nitro-	81
	Carbamate-Halides	
4880	Carbanilic acid, 5-chloro-2-methoxy-, isopropyl ester	83
5255	-----, 2-methoxy-5-methyl-, 2-chloroethyl ester	95
4920	Ethanol, 2-(2,4-dichlorophenoxy)-, carbanilate	67
5256	m-chlorocarbanilate	73
6323	2-Propanol, 1-chloro-3-isopropoxy-, carbanilate	78
	Ester-Halides	
5201	Benzoic acid, o-ethoxy-, p-chlorophenyl ester	75
6296	Cinnamic acid, α-bromo-3,4-dimethoxy-, methyl ester	51
3103	Fumaric acid, bis[2-(2-chloroethoxy)ethyl] ester	57
6299	Hydrocinnamic acid, α-bromo-β,3,4-trimethoxy-, methyl ester	24
6297	-----, α,β-dibromo-3,4-dimethoxy-, methyl ester	26
3110	Maleic acid, bis[2-(2-chloroethoxy)ethyl] ester	81
3030	1,2-Propanediol, 3-pentachlorophenoxy-, diacetate	83
5207	Propanol, 3-(3-phenoxypropoxy)-, bromoacetate	84
	Ester-Lactones	
2789	α-Conidendrin, diacetate	41
2790	β-Conidendrin, diacetate	20
	Ester-Phenols	
5903	Ferulic acid, ethyl ester	29
5902	methyl ester	30
	Halide-Heterocyclic Compounds	
4323	Propane, 3-(2,4,5-trichlorophenoxy)-1,2-epoxy-	82
4176	Pyran, 3-bromo-2-ethoxytetrahydro-	66
4174	-----, 3-bromotetrahydro-2-methoxy-	58
4175	-----, 3,4-dibromo-2-ethoxytetrahydro-	100
	Halide-Lactones	
3623	2(5H)-Furanone, 3,4-dichloro-5-dodecyloxy-	82
3632	-----, 5,5'-oxybis[3,4-dichloro-	65

TABLE I

Code No.	Classification and Name	K Value
	ETHERS	
	Disubstituted	
	Halide-Nitriles	
5075	Acetonitrile, 2,4-dichlorophenoxy-	100
5080	Propionitrile, 3-(o-chlorophenoxy)-	84
	Halide-Nitro Compounds	
4877	Anisole, 2,3,5,6-tetrachloro-4-nitro-	83
4561	Ether, p-bromophenyl 2,4-dinitrophenyl	17
4786	-----, 4-tert-butyl-2-chlorophenyl 2,4-dinitrophenyl	23
4560	-----, p-chlorophenyl 2,4-dinitrophenyl	45
	Halide-Thiocyanates	
5676	Butanal, 3-chloro-, bis[2-(2-thiocyanatoethoxy)-ethyl] acetal	87
5667	Phenetole, p-chloro-β-thiocyanato-	100
	Halide-Thioureas	
5698	2-Imidazoline, 2-[2-(2-chloroethoxy)ethylthio]-	93
5430	hydrochloride	87
	Heterocyclic-Hydrazines	
3976	p-Anisaldehyde, (2-benzothiazolyl)hydrazone	71
4547	Benzaldehyde, o-ethoxy-, 2-benzoxazolylhydrazone	23
	Heterocyclic-Nitro Compounds	
6384	Benzothiazole, 2-butoxy-6-nitro-	89
5320	Ether, methyl 5-nitrofurfuryl	84
4979	-----, tetrahydrofurfuryl 2,4-dinitrophenyl	98
4420	Furan, 2-(2,4-dinitrophenoxymethyl)tetrahydro-	100
2736	-----, 2-methoxymethyl-5-nitro-	95
	Imine-Phenols	
2984	o-Cresol, α-(p-ethoxyphenylimino)-	24
4984	Phenol, o-[(p-methoxybenzylidene)amino]-	72
	Lactone-Sulfonic Acid Esters	
2794	α-Conidendrin, di-p-toluenesulfonate	22
2795	β-Conidendrin, di-p-toluenesulfonate	15
	Nitro-Phenols	
4088	1-Butene, 1-(4-hydroxy-3-methoxyphenyl)-2-nitro-	93
4897	Isoeugenol, β-nitro-	83
7148*	Styrene, 4-hydroxy-3-methoxy-β-nitro-	88

TABLE I

Code No.	Classification and Name	K Value
	ETHERS	
	Disubstituted	
	Nitro-Thiocyanates	
5666	Phenetole, 4-(1-methylheptyl)-x-nitro-β-(2-thiocyanatoethoxy)-	80
5665	-----, 2-nitro-4-tert-pentyl-β-thiocyanato-	98
	Miscellaneous	
4115	Acetamide, 2-(2-hydroxyethoxy)-	28
6648	p-Acetanisidide, 2'-acetyl-	87
7263	Acetic acid, [o-(N-allylcarbamoyl)phenoxy]-	-11
5910	Acetonitrile, (4-hydroxy-3-methoxyphenyl)-, acetate	33
2921	o-Anisidine, 5-(ethylsulfonyl)-	32
4178	Benzamide, N-homopiperonyl-3,4,5-trimethoxy-	45
5410	Benzenesulfonic acid, p-methoxy-, p-chlorophenyl ester	51
4475	Benzophenone, 4-(2-hydroxyethoxy)-	62
7090	Carbamic acid, dimethyldithio-, 2-(2,4-dichlorophenoxy)-ethyl ester	73
5525	Cinnamic acid, 4-acetoxy-3-methoxy-	31
4379	o-Cresol, 3,4,6-trichloro-α-(2,3,5-trichloro-6-methoxyphenyl)-	42
4478	Ethanol, 2-[2-nitro-4-(tert-pentyl)phenoxy]-	88
3691	Ether, pentachlorophenyl 2-(phenethylthio)ethyl	83
2721	α-D-Glucoside, 1-allyl-	32
5247	Lactic acid, 2-methoxy-5-methylcarbanilate-, butyl ester	87
6745	Maleamic acid, N-carbamoyl-, 2-(p-octylphenoxy)ethyl	74
5830	Maleimide, 2,3-dichloro-N-(2-methoxymethyl)-	97
3338	Opianic acid	35
5677	Orthophosphorus acid, bis[2-(2-thiocyanatoethoxy)-ethyl] ester	82
2880	Phosphoric acid, 2-(2,4-dichlorophenoxy)ethyl diethyl ester	78
6293	1-Propanol, 3-(4-hydroxy-3-methoxyphenyl)-	35
5234	Propiophenone, 2-bromo-3',4'-dimethoxy-	66
	Psuedoindolium compounds.	
4719	2-[2-(2,4-dimethoxyanilino)vinyl]-1,3,3-trimethyl-3H-----chloride	66
5555	Rhodanine, 5-vanillylidene-	67
4490	s-Triazine, 2,2'-[oxybis(ethylenethio)]bis[4,6-diamino-	25
	Polysubstituted	
5117	Acetic acid, [(2-amino-5-ethoxyphenyl)thio]-	81

TABLE I

Code No.	Classification and Name	K Value
	ETHERS	
	Polysubstituted	
3970	Acetic acid, diethyldithiocarbamoyl-, 2-(pentachlorophenoxy)ethyl ester	97
3965	-----, thiocyanato-, 2-(pentachlorophenoxy)ethyl ester	85
6642	Acetophenone, 2-(benzylmethylamino)-3'-chloro-4'-ethoxy-, hydrochloride	87
6646	Acridine, 6-chloro-9-[[4-(diethylamino)-1-(4-pyridyl)butyl]amino]-2-methoxy-, trihydrochloride, monohydrate	98
6555	-----, 6-chloro-9-[β-[2-(diethylamino)ethyl]phenethylamino]-2-methoxy-, dihydrochloride	95
6644	-----, 6-chloro-9-[α-[3-(diethylamino)propyl]phenethylamino]-2-methoxy-, dihydrochloride, trihydrate	98
6560	-----, 6-chloro-9-[β-[2-(dimethylamino)ethyl]phenethylamino]-2-methoxy-, dihydrochloride	88
7226	9-Acridone, 3-chloro-7-methoxy-	-10
5545	Ammonium compounds. hexadecyl[2-[(p-methoxybenzyl)-2-pyrimidinylamino]ethyl]dimethyl----- bromide	82
4935	o-Anisidineethanol, α-chloromethyl-	67
7224	Anthranilic acid, 4-chloro-N-(p-methoxyphenyl)-	69
6558	Benzyl alcohol, α-(benzylethylaminomethyl)-3-chloro-4-ethoxy-, hydrochloride	92
6557	-----, 3-chloro-4-ethoxy-α-(phenethylaminomethyl)-, hydrochloride	66
3675	Crotonic acid, α-anilino-β-chloro-γ-hydroxy-γ-methoxy-, γ-lactone	34
6094	Ethanol, 2-[N-(3-chloroallyl)-5-chloro-3-methoxyanilino]-	
6298	Hydracrylic acid, 2-bromo-3-(3,4-dimethoxyphenyl)-, methyl ester	9
5936	Lactic acid, m-chlorocarbanilate-, 2-(2,4-dichlorophenoxy)ethyl ester	74
5997	-----, m-methylcarbanilate, 2-(2,4-dichlorophenoxy)-ethyl ester	48
2800	2-Naphthamide, 1,2,3,4-tetrahydro-6-hydroxy-4-(4-hydroxy-3-methoxyphenyl)-3-hydroxymethyl-7-methoxy-, from α-conidendrin	18
5678	Phosphonic acid, (2,2,3-trichloro-1-hydroxybutyl)-, bis[2-(2-thiocyanatoethoxy)ethyl] ester	84
5679	-----, (2,2,2-trichloro-1-hydroxyethyl)-, bis[2-(2-thiocyanatoethoxy)ethyl] ester	84
5293	Propionitrile, 3-(2-hydroxyethoxy)-, m-chlorocarbanilate	63
5233	Propiophenone, 3-chloro-4'-hydroxy-3'-methoxy-	77

TABLE I

Code No.	Classification and Name	K Value
	ETHERS	
	Polysubstituted	
6309	Protocatechuyl alcohol, α-[1-(p-methoxyphenyl)-2-propylaminomethyl]-, hydrochloride	89
5908	Pyruvic acid, (4-hydroxy-3-methoxyphenyl)-, oxime	27
5528	-----, (4-hydroxy-3-methoxyphenyl)-2-thio-	71
6067	Quinocrine, salt with 1 f. wt. sulfamic acid	82
3721	Quinoline, 5-bromo-6-methoxy-8-nitro-	-7
6320	4-Quinolinemethanol, 3-(p-chlorophenyl)-α-(diethylaminomethyl)-6-methoxy-	75
6540	-----, α-(3-dibutylaminopropyl)-6-methoxy-, hydrochloride	93
	Quinolinium compounds.	
6069	4-chloro-2-[p-(dimethylamino)phenyliminomethyl]-6-methoxy-1-methyl----- chloride	89
6068	Sulfanil-p-anisidide, N^4-(1-sulfoethyl)-2'-(1-sulfoethylamino)-, disodium salt, tetrahydrate	24
	GUANIDINES	
	Unsubstituted	
2716	Guanidine, salt with 1 f. wt. fluosilicic acid	74
3652	-----, 1,3-diphenyl-, salt with pentachlorophenol	90
7082	-----, 1,3-di-o-tolyl-	97
4555	-----, 1,1'-(methylenedi-p-phenylene)di-, sulfate	98
4550*	-----, octadecyl-, hydrogensulfate	96
4551*	-----, tetradecyl-, hydrogensulfate	92
7081	-----, triphenyl-	96
	Substituted	
5015	Acetamide, N-(cyanoamidino)-	67
6698	Benzimidazole, 1-acetyl-2-amino-, hydrochloride	56
6632	Guanidine, (2-benzimidazolyl)-	100
2989	-----, 1,3-dicyano-, potassium salt	36
5192	-----, 1H-tetrazol-5-yl-	93
4544	Isonicotinamide, N-(3-guanylguanidino)-	90
	HALIDES	
	Unsubstituted	
	Bromides	
4211	Benzene, p-dibromo-	47
2825	-----, (1,2-dibromoethyl)-	99
3369	-----, 1,2,4-tribromo-	83
3332	-----, 1,3,5-tribromo-	-19

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Unsubstituted	
	Bromides	
4155	Biphenyl, 3-bromo-	88
6023	-----, 4-bromo-	83
2826, 4205	-----, 4,4'-dibromo-	-10, -8
4142, 4209	Butane, 1,2,3,4-tetrabromo-	92, 94
6024	Cyclohexane, 1,2,3,4,5,6-hexabromo-	25
4201	Ethane, 1,1,2,2-tetrabromo-	94
4214	Methane, bromodiphenyl-	94
3392	Pentane, 1,2,3,4-tetrabromo-	-117
	Chlorides	
5522	Anthracene, 2-chloro-	41
3393	Benzene, 2,4-bis(chloromethyl)-1,3,5-trimethyl-	85
3208	-----, 2,5-dichloro-1-(1-chloroethyl)-	86
4190	-----, (1,2-dichloroethyl)-	75
3561	-----, hexachloro-	3
3371	-----, pentachloroethyl-	-46
4341	-----, 1,3,5-trichloro-	61
3182	Biphenyl, 4-chloro-	98
3471	Cumene, 2,5-dichloro-	50
4266	Cyclohexane, 1,2,3,4,5,6-hexachloro-, δ-isomer	99
4098	Cyclopentadiene-, 1,2,3,4,5-pentachloro-5-trichloromethyl-	76
4130	Ethane, 1,2-dichloro-1,1,2,2-tetraphenyl-	-4
3838	-----, perchloro-	-59
6022	Ethylene, 2,2-bis(p-chlorophenyl)-1,1-dichloro-	53
5490	Hexane, 2,5-dichloro-2,5-dimethyl-	14
5350	Methane, (4-biphenylyl)chlorodiphenyl-	59
5349, 5919	Naphthalene, 2-(chloromethyl)-	97, 99
	Fluorides	
3466	Biphenyl, 4,4'-difluoro-	80
	Iodides	
3122	Benzene, iodoso-	91
3121	-----, iodoxy-	87
4156	Biphenyl, 2-iodo-	90
	Mixed	
3370	Benzene, 1,3,5-trichloro-2-iodo-	83
2971	Ethane, 2,2-bis(p-fluorophenyl)-1,1,1-trichloro-	85

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Monosubstituted	
	Acid Anhydrides	
5941	Bicyclo[2.2.1]hept-5-ene-2-acetic acid, 2-carboxy-1,4,5,6,7,7-hexachloro-, cyclic anhydride	46
5339	Cyclohexane-1,2-dicarboxylic anhydride, 4,5-dichloro-3,6-endoxy-	48
3745, 4013		60, 74
5304	Phthalic anhydride, tetrachloro-	84
	Acids	
3997	Acetic acid, p-chlorophenyl-	34
5437	Acrylic acid, α,β-dichloro-	98
3572	-----, perchloro-, sodium salt	77
3990	Adipic acid, perfluoro-	-10
2847	1-Apobornaneacetic acid, 2-chloro-	14
3620	Benzoic acid, o-chloro-, bismuth(III) salt	-44
3621	copper(II) salt	43
3080	nickel(II) salt	15
3081	-----, p-chloro-, nickel(II) salt	38
3292	-----, 3,4-dichloro-, nickel(II) salt	52
3313	Crotonic acid, α,β-dichloro-γ,γ-diphenyl-	92
3604	Hydrocinnamic acid, α,β-dibromo-	55
3409	β-Isodurylic acid, 3-bromo-	62
5839	Maleic acid, dichloro-	30
4933	Phthalic acid, 4-chloro-	69
4001	-----, perchloro-	68
3988	Succinic acid, perfluoro-	9
	Alcohols	
3083	9,10-Anthracenediol, 1-chloro-9,10-dihydro-9,10-diphenyl-	42
3084	-----, 2-chloro-9,10-dihydro-9,10-diphenyl-	48
2848	1-Apobornaneethanol, 2-chloro-	69
5231	Benzyl alcohol, 2,4-dichloro-	63
5232	-----, 3,4-dichloro-	57
5939	1-Heptanol, 2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoro-	27
5940	1-Nonanol, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-hexadecafluoro-	72
5938	1-Pentanol, 2,2,3,3,4,4,5,5-octafluoro-	18
7164	1-Pentyn-3-ol, 1-chloro-3-ethyl-	66
5942	1-Propanol, 2,2,3,3-tetrafluoro-	20

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Monosubstituted	
	Alcohols	
5009	2-Propanol, 1,1,1,3,3,3-hexachloro-	92
3340	-----, 1-iodomercuri-	97
3085	-----, 1,1,1-tribromo-2-methyl-	69
5237	2-Propyn-1-ol, 1,1-bis(p-chlorophenyl)-	91
	Amides	
6090	Acetamide, N-allyl-2-chloro-	87
7041	-----, 2-bromo-N-sec-butyl-	99
7178	-----, 2-bromo-N-cyclohexyl-	99
5819	-----, N-tert-butyl-, hydrogeniodide, compound with ½ f. wt. iodine	70
3485	-----, 2-chloro-	21
4930	-----, 2-chloro-N-hexadecyl-	72
6132	Acetanilide, 2'-acetamido-4'-chloro-	75
7063	-----, 2'-bromo-	66
3099	-----, 2-chloro-	89
7049	-----, 2'-chloro-	94
7064	-----, 4'-chloro-	87
7051	-----, 2,2-dichloro-	94
5048	-----, 2',5'-dichloro-	71
5049	-----, 2',5'-dichlorodi-	76
6020	-----, 4'-iodo-	80
7053	-----, 2,2,2-trichloro-	96
7181	Aceto-o-toluidide, 2-bromo-	92
5326	Acrylamide, N-(m-chlorophenyl)-	67
5842	-----, 2,3-dichloro-N-(m-chlorophenyl)-	95
4778	Benzamide, N-benzyl-o-chloro-	89
4779	-----, N-benzyl-p-chloro-	34
4437	-----, N-benzyl-2,4-dichloro-	48
4443	-----, N-sec-butyl-o-chloro-	93
4775	-----, o-chloro-N-cyclohexyl-	80
4776	-----, p-chloro-N-cyclohexyl-	80
4781	-----, p-chloro-N,N-dipropyl-	98
4454	-----, p-chloro-N-(1-methylpentyl)-	95
4444	-----, o-chloro-N-pentyl-	89
4780	-----, p-chloro-N-2(or 3?)-pentyl-	90
4436	-----, 2,4-dichloro-N-cyclohexyl-	71
4902	-----, 2,4-dichloro-N-isobutyl-	85
4919	-----, 2,4-dichloro-N-(1-methylbutyl)-	87
4459	-----, 2,4-dichloro-N-pentyl-	90
4445	Benzanilide, 4'-bromo-2-chloro-	85
4456	-----, 2'-bromo-2,4-dichloro-	35

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Monosubstituted	
	Amides	
4429	Benzanilide, 4'-bromo-2,4-dichloro-	58
4430	-----, 4'-bromo-3,4-dichloro-	41
6428	-----, 2'-chloro-	35
6429	-----, 3'-chloro-	12
4449	-----, 4-chloro-	52
6430	-----, 4'-chloro-	6
4447	-----, 2,2'-dichloro-	75
4448	-----, 2,3'-dichloro-	59
4457	-----, 2,4'-dichloro-	98
4773	-----, 2',4-dichloro-	14
6431	-----, 2',5'-dichloro-	14
4774	-----, 3',4-dichloro-	3
4458	-----, 2,4-dichloro-2'-phenyl-	38
4428	-----, 2,2',4,5'-tetrachloro-	33
4455	-----, 2',3,4,5'-tetrachloro-	30
4905	-----, 2,2',4-trichloro-	32
4906	-----, 2,3',4-trichloro-	36
4432	-----, 2',3,4-trichloro-	17
4907	-----, 2,4,4'-trichloro-	28
4433	-----, 2,4,5'-trichloro-	35
4434	-----, 3,3',4-trichloro-	72
4450	m-Benzotoluidide, 2-chloro-	64
4451	o-Benzotoluidide, 2-chloro-	72
4452	p-Benzotoluidide, 2-chloro-	90
4440	o-Benzotoluidide, 4-chloro-	57
4441	p-Benzotoluidide, 4-chloro-	40
4908	m-Benzotoluidide, 2,4-dichloro-	13
4910	p-Benzotoluidide, 2,4-dichloro-	26
4909	m-Benzotoluidide, 3,4-dichloro-	36
6153	Butyranilide, 4'-bromo-	67
5066	-----, 2'-chloro-	63
5065	-----, 3'-chloro-	95
5067	-----, 4'-chloro-	90
5441	-----, 3'-chloro-perfluoro-	65
5847	-----, 3'-chloro-2,2,3-trichloro-	73
5070	-----, 2',5'-dichloro-	61
6178	Formanilide, 2'-chloro-	53
6180	-----, 3'-chloro-	41
6181	-----, 4'-chloro-	95
5763	-----, 2',4'-dichloro-	76
6182	-----, 2',5'-dichloro-	55

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Monosubstituted	
	Alcohols	
5009	2-Propanol, 1,1,1,3,3,3-hexachloro-	92
3340	-----, 1-iodomercuri-	97
3085	-----, 1,1,1-tribromo-2-methyl-	69
5237	2-Propyn-1-ol, 1,1-bis(p-chlorophenyl)-	91
	Amides	
6090	Acetamide, N-allyl-2-chloro-	87
7041	-----, 2-bromo-N-sec-butyl-	99
7178	-----, 2-bromo-N-cyclohexyl-	99
5819	-----, N-tert-butyl-, hydrogeniodide, compound with ½ f. wt. iodine	70
3485	-----, 2-chloro-	21
4930	-----, 2-chloro-N-hexadecyl-	72
6132	Acetanilide, 2'-acetamido-4'-chloro-	75
7063	-----, 2'-bromo-	66
3099	-----, 2-chloro-	89
7049	-----, 2'-chloro-	94
7064	-----, 4'-chloro-	87
7051	-----, 2,2-dichloro-	94
5048	-----, 2',5'-dichloro-	71
5049	-----, 2',5'-dichlorodi-	76
6020	-----, 4'-iodo-	80
7053	-----, 2,2,2-trichloro-	96
7181	Aceto-o-toluidide, 2-bromo-	92
5326	Acrylamide, N-(m-chlorophenyl)-	67
5842	-----, 2,3-dichloro-N-(m-chlorophenyl)-	95
4778	Benzamide, N-benzyl-o-chloro-	89
4779	-----, N-benzyl-p-chloro-	34
4437	-----, N-benzyl-2,4-dichloro-	48
4443	-----, N-sec-butyl-o-chloro-	93
4775	-----, o-chloro-N-cyclohexyl-	80
4776	-----, p-chloro-N-cyclohexyl-	80
4781	-----, p-chloro-N,N-dipropyl-	98
4454	-----, p-chloro-N-(1-methylpentyl)-	95
4444	-----, o-chloro-N-pentyl-	89
4780	-----, p-chloro-N-2(or 3?)-pentyl-	90
4436	-----, 2,4-dichloro-N-cyclohexyl-	71
4902	-----, 2,4-dichloro-N-isobutyl-	85
4919	-----, 2,4-dichloro-N-(1-methylbutyl)-	87
4459	-----, 2,4-dichloro-N-pentyl-	90
4445	Benzanilide, 4'-bromo-2-chloro-	85
4456	-----, 2'-bromo-2,4-dichloro-	35

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Monosubstituted	
	Amides	
4429	Benzanilide, 4'-bromo-2,4-dichloro-	58
4430	-----, 4'-bromo-3,4-dichloro-	41
6428	-----, 2'-chloro-	35
6429	-----, 3'-chloro-	12
4449	-----, 4-chloro-	52
6430	-----, 4'-chloro-	6
4447	-----, 2,2'-dichloro-	75
4448	-----, 2,3'-dichloro-	59
4457	-----, 2,4'-dichloro-	98
4773	-----, 2',4-dichloro-	14
6431	-----, 2',5'-dichloro-	14
4774	-----, 3',4-dichloro-	3
4458	-----, 2,4-dichloro-2'-phenyl-	38
4428	-----, 2,2',4,5'-tetrachloro-	33
4455	-----, 2',3,4,5'-tetrachloro-	30
4905	-----, 2,2',4-trichloro-	32
4906	-----, 2,3',4-trichloro-	36
4432	-----, 2',3,4-trichloro-	17
4907	-----, 2,4,4'-trichloro-	28
4433	-----, 2,4,5'-trichloro-	35
4434	-----, 3,3',4-trichloro-	72
4450	m-Benzotoluidide, 2-chloro-	64
4451	o-Benzotoluidide, 2-chloro-	72
4452	p-Benzotoluidide, 2-chloro-	90
4440	o-Benzotoluidide, 4-chloro-	57
4441	p-Benzotoluidide, 4-chloro-	40
4908	m-Benzotoluidide, 2,4-dichloro-	13
4910	p-Benzotoluidide, 2,4-dichloro-	26
4909	m-Benzotoluidide, 3,4-dichloro-	36
6153	Butyranilide, 4'-bromo-	67
5066	-----, 2'-chloro-	63
5065	-----, 3'-chloro-	95
5067	-----, 4'-chloro-	90
5441	-----, 3'-chloro-perfluoro-	65
5847	-----, 3'-chloro-2,2,3-trichloro-	73
5070	-----, 2',5'-dichloro-	61
6178	Formanilide, 2'-chloro-	53
6180	-----, 3'-chloro-	41
6181	-----, 4'-chloro-	95
5763	-----, 2',4'-dichloro-	76
6182	-----, 2',5'-dichloro-	55

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Monosubstituted	
	Amides	
5848	Isobutyranilide, 3'-chloro-	67
5748	-----, 4'-chloro-	(T)
5758	-----, 2',4'-dichloro-	61
7126	Oxanilide, 3,3'-dichloro-	32
5963	Phthalamide, N,N'-bis(o-chlorophenyl)-	95
6689	Propionamide, 3-chloro-N-methyl-	67
7179	Propionanilide, 2'-bromo-	96
6106	-----, 4'-bromo-	85
5054	-----, 2'-chloro-	63
3100, 5055	-----, 3'-chloro-	77, 62
5053	-----, 4'-chloro-	92
4686, 5056	-----, 2',5'-dichloro-	47, 58
6110	o-Propionotoluidide, 5'-chloro-	57
	Amines	
4808	Aniline, N-allyl-o-chloro-	80
2916	-----, 3,5-bis(trifluoromethyl)-	60
5861	-----, m-chloro-	96
4312*	-----, 4,4'-(p-chlorobenzylidene)bis[N,N-dimethyl-	97
4233	-----, 2,4,6-tribromo-	89
4243	Benzidine, 3,3'-dichloro-, dihydrochloride	93
6290	1,3-Butanediamine, N^3-(p-chlorophenyl)-N^1-isopropyl-, monohydrobromide	95
6513	Dibenzylamine, 4-bromo-N-cyclohexyl-	57
3128	Ethylamine, 2-bromo-, hydrochloride	100
3982	Hexylamine, 6-bromo-N,N-diethyl-, hydrochloride	41
4745	2,4-Xylidine, α^4-(o-chlorophenyl)-N-ethyl-α^4-(4-ethylamino-3-methyl-2,5-cyclohexadienylidene)-, monohydrochloride	100
	Carbamates	
5290	Allyl alcohol, 1-(chloromethyl)-, m-chlorocarbanilate	93
5257	4,4'-Bicarbanilic acid, 3,3'-dichloro-, diisopropyl ester	-15
5917	2-Butanol, 3-methyl-, m-chlorocarbanilate	74
5292	-----, 1,3,4-trichloro-, carbanilate	69
5467	2-Butenol, 3-chloro-, carbanilate	59
4493	Carbamic acid, 2-chloroethyl ester	92
6258	2-fluoroethyl ester	(T)
5479	-----, dimethyl-, p-chlorophenyl ester	95
5476	-----, ethyl-, p-chlorophenyl ester	61

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Monosubstituted	
	Carbamates	
3681	Carbanilic acid, 2-chloroethyl ester	84
5764	2,4-dichlorophenyl ester	58
3858, 6257	2-fluoroethyl ester	(T), 87
5459	-----, m-chloro-, allyl ester	91
6259	sec-butyl ester	86
6264	tert-butyl ester	47
5562	2-chloroallyl ester	86
5288	3-chloroallyl ester	93
4879	2-chloroethyl ester	64
6265	2-cyclopenten-1-yl ester	32
5932	1,1-dimethylpropyl ester	86
6261	2-fluoroethyl ester	99
5559	α-methylbenzyl ester	52
5933	1-methylbutyl ester	86
5934	2-methylbutyl ester	54
3364	propyl ester	69
5553	2-propynyl ester	92
3367	-----, o-chloro-, ethyl ester	65
5462	isopropyl ester	93
3365	-----, p-chloro-, isopropyl ester	72
6321	2-propynyl ester	78
4916	-----, 5-chloro-2-methyl-, 2-chloroethyl ester	76
4340	isopropyl ester	81
5464	-----, m-chloro-N-methyl-, isopropyl ester	90
4375	-----, 3-chloro-2-methyl-, isopropyl ester	50
4376	-----, 3-chloro-4-methyl-, isopropyl ester	70
4913	-----, 2,5-dichloro-, 2-chloroethyl ester	54
3363	isopropyl ester	73
5930	2-propynyl ester	87
4687	-----, 2,3-dichloro-, isopropyl ester	82
4373	-----, 2,4-dichloro-, isopropyl ester	74
5156	-----, 3,5-dichloro-, isopropyl ester	85
4688	-----, 3,5-dichloro-2-methyl-, isopropyl ester	77
4917	-----, m-methyl-, 2-chloroethyl ester	87
5482	-----, m-(trifluoromethyl)-, isopropyl ester	63
5560	Cyclohexanol, 1-ethynyl-, m-chlorocarbanilate	41
4121	Ethylene glycol, bis(m-chlorocarbanilate)	6
5296	Indan, 4-hydroxy-, m-chlorocarbanilate	83
5297	-----, 5-hydroxy-, m-chlorocarbanilate	7
5465	2-Propanol, 1-chloro-, m-chlorocarbanilate	47
5460	m-methylcarbanilate	75
5037	-----, 1,3-dichloro-, m-chlorocarbanilate	74
5291	-----, 3,3,3-trichloro-2-methyl-, carbanilate	22

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Monosubstituted	
	Carbonates	
6805*	Carbonic acid, cyclic chloromethylethylene ester	97
6807	cyclic 1,2-dichloroethylene ester	77
3344	-----, isopropyl 2,4-dichlorophenyl ester	33
3341	pentachlorophenyl ester	90
3342	x,x,x,x-tetrachlorophenyl ester	82
3343	2,4,5-trichlorophenyl ester	32
3345, 5439	-----, methyl 2,4,5-trichlorophenyl ester	75, 84
	Esters	
4108	Acetic acid, chloro-, pentachlorophenyl ester	88
5509	Acrylic acid, 2-chloro-3-hydroxy-, benzoate, ethyl ester	92
4821	Adipic acid, bis(x-chloroallyl) ester	84
2850	1-Apocamphaneethanol, 2-chloro-, acetate	57
5203	Benzoic acid, p-bromophenyl ester	-109
5209	-----, o-chloro, cyclohexyl ester	72
5206	Benzyl alcohol, 3,4-dichloro-, hexanoate	66
3086	Fumaric acid, bis(2-chloroethyl) ester	79
3111	Maleic acid, chloro-, bis(2-chloroethyl) ester	95
5438*	-----, dichloro-, diallyl ester	98
3230	Phthalic acid, tetrachloro-, diethyl ester	86
5208	10-Undecenoic acid, 2-chloroethyl ester	97
	Ethers	
3027	Anisole, 2,3,4,5,6-pentachloro-	87
4868	-----, 2,4,5-trichloro-	81
3102	Ethane, 1-(2-biphenylyloxy)-2-(2-chloroethoxy)-	49
4383	-----, 2,2-bis(3,5-dichloro-2-methoxyphenyl)-1,1,1-trichloro-	29
2976	-----, 2,2-bis(p-ethoxyphenyl)-1,1,1-trichloro-	32
3104	Ether, benzyl 2-chloroethyl	75
3105	-----, bis(2-bromoethyl)	86
2846, 4207	-----, bis(p-bromophenyl)	51, 85
4871	-----, butyl 2,3,5,6-tetrachlorophenyl	79
4141	Methane, bis(p-chlorophenoxy)-	61
3107	Naphthalene, 2-(2-chloroethoxy)-	69
2844, 4218	Phenetole, β-chloro-	92, 68
7206	-----, p-chloro-	65
2851	-----, β-chloro-o-phenyl-	70
	Heterocyclic Compounds	
7108	2H, 6H-1,5-Benzoxathiocin, 3,8-dichloro-3,4-dihydro-	83

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Monosubstituted	
	Heterocyclic Compounds	
3238	Carbazole, 3-chloro-	72
3237	-----, 3,6-dichloro-	64
2992	Cyanuric chloride	63
3535	Dibenzothiophene, 2-chloro-	58
3748	-----, x-chloro-	96
3536	crude	91
5385	m-Dioxane, 2-(p-chlorophenyl)-4-methyl-	90
5382	1,3-Dioxolane, 2-(o-chlorophenyl)-4,5-dimethyl-	74
5372	-----, 2-(o-chlorophenyl)-4-methyl-	74
5371	-----, 2-(p-chlorophenyl)-4-methyl-	65
3989	Oxepane, dodecafluoro-	-47
3991	Oxonane, hexadecafluoro-	-119
3097	Pyridine, 2-bromo-	69
3098	-----, 3-bromo-	54
7171	-----, 2-(p-chlorostyryl)-	92
7172	-----, 4-(p-chlorostyryl)-	92
4150	Quinoline, 4,5-dichloro-	90
6256	2-Stilbazole, 2',4'-dichloro-	88
3234	2,4,8,10-Tetraoxaspiro[5.5]undecane, 3,9-bis(trichloromethyl)-	9
4380	1,3,5,7-Tetroxocane, 2,6-bis(trichloromethyl)-	46
3800	Thianaphthene, 3-chloro-	86
3801	-----, 2,3-dichloro-	86
3563	-----, 2,3(?)-dichloro-	92
3803	-----, 2,3,x,x,x-pentachloro-	3
3802	-----, 2,3,x,x-tetrachloro-	38
3054	Thiophene, 2,5-dibromo-	54
3841	-----, 2-(1,2-dibromoethyl)-5-chloro-	86
	Hydroxylamine Derivatives	
6268	Acetone, O-(p-chlorophenylcarbamoyl)oxime	81
6322	-----, O-(2,5-dichlorophenylcarbamoyl)oxime	31
4234	Acetophenone, p-chloro-, oxime	83
4472	Benzaldehyde, 3,4-dichloro-, O-(3,4-dichlorobenzyl)oxime	52
	Imides	
5845	Bicyclo[2.2.1]hept-5-ene-2,3-dicarboximide, 1,4,5,6,7,7-hexachloro-N-ethyl-	74
2934	Bicyclo[2.2.1]hept-2-ene-5,6-dicarboximide, 1,2,3,4,7,7-hexachloro-N-pentyl-	-65

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Monosubstituted	
	Imides	
5823	Maleimide, N-allyl-2,3-dichloro-	100
5833	-----, N-benzyl-2,3-dichloro-	55
3808	-----, N-(m-chlorophenyl)-	73
3807	-----, N-(o-chlorophenyl)-	80
3809	-----, N-(p-chlorophenyl)-	84
5835	-----, 2,3-dichloro-N-cyclohexyl-	56
5829	-----, 2,3-dichloro-N-decyl-	89
5825	-----, 2,3-dichloro-N-ethyl-	100
5831	-----, 2,3-dichloro-N-(2-ethylhexyl)-	92
5828	-----, 2,3-dichloro-N-hexyl-	98
5827	-----, 2,3-dichloro-N-isobutyl-	100
5824	-----, 2,3-dichloro-N-methyl-	100
5834	-----, 2,3-dichloro-N-phenethyl-	33
5453	-----, 2,3-dichloro-N-phenyl-	24
5826	-----, 2,3-dichloro-N-propyl-	98
5837	-----, 2,3-dichloro-N-(m-tolyl)-	19
5836	-----, 2,3-dichloro-N-(o-tolyl)-	77
5838	-----, 2,3-dichloro-N-(p-tolyl)-	51
5687	Phthalimide, N-[bis(p-chlorophenyl)methyl]-	65
5338, 5975	-----, N-(2-bromoethyl)-	59, 84
7058	-----, x-(2-bromoethyl)-	93
3722	-----, N-(3-bromopropyl)-	70
4412	-----, N-(m-chlorophenyl)-	26
5686	-----, tetrachloro-	95
6345	Pyromellitic acid, diimide, N,N'-bis(m-chlorophenyl)-	-43
6344	-----, diimide, N,N'-bis(o-chlorophenyl)-	-102
6346	-----, diimide, N,N'-bis(p-chlorophenyl)-	-12
6350	-----, diimide, N,N'-bis(3-chloro-2-tolyl)-	-61
7087	Succinimide, 2-chloro-3-(x-chlorophenyl)-N-phenyl-	58
3226	-----, 2-chloro-N-phenyl-	86
	Iodonium Compounds	
	Iodonium compounds.	
2861	bis(2-bromo-4-chlorophenyl)----- chloride	88
2862	bis(2-bromo-4-chlorophenyl)----- iodide	91
2863	bis(2-bromo-4-chlorophenyl)----- sulfate	86
2870	bis(p-bromophenyl)----- chloride	99
2871	bis(p-bromophenyl)----- iodide	65
2872	bis(p-bromophenyl)----- sulfate	73
2864	bis(2,4-dichlorophenyl)----- chloride	85
2865	bis(2,4-dichlorophenyl)----- iodide	90
2866	bis(2,4-dichlorophenyl)----- sulfate	79

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Monosubstituted	
	Iodonium Compounds	
	Iodonium compounds.	
2867	bis(3,4-dichlorophenyl)----- chloride	85
2868	bis(3,4-dichlorophenyl)----- iodide	94
2869	bis(3,4-dichlorophenyl)----- sulfate	100
2873	bis(p-fluorophenyl)----- chloride	100
2874	bis(p-fluorophenyl)----- iodide	(T)
	Ketones	
7098	Acetophenone, 2,2,4'-trichloro-	73
7124	-----, m-trichloromethyl-	68
2845, 4219	Benzophenone, 4-chloro-	91, 77
4203	Camphor, α-bromo-	67
4173	Chalcone, 4-chloro-	30
2843	2,5-Cyclohexadien-1-one, hexachloro-	(T)
4177	2-Cyclohexen-1-one, 3-(m-chlorophenyl)-	63
4888, 4948	-----, 2,3,4,4,5,6,6-heptachloro-	84, 97
4378	1,3-Indanedione, 2-chloro-2-isovaleryl-	47
4377	-----, x,x-dichloro-2-propionyl-	53
3793, 4111	4,7-Methanoindene-1,8-dione, 2,3,3a,4,5,6,7,7a-octachloro-3a,4,7,7a-tetrahydro-	72, 64
6010	Propiophenone, 4'-chloro-	56
	Lactones	
3770	1,3-Benzodioxan-4-one, 6-bromo-2-methyl-	87
3826	-----, 6-chloro-2,8-dimethyl-	88
3752	-----, 6-chloro-2-methyl-	78
3228	-----, 2-(o-chlorophenyl)-	54
3823	-----, 2-(2,6-dichlorophenyl)-	32
6815	2-Biphenylcarboxylic acid, 5'-chloro-2'-hydroxy-, δ-lactone	95
3622	Crotonic acid, 2,3-dichloro-4-hydroxy-4-phenyl-, γ-lactone	24
	Nicotine Derivatives	
	Nicotinium compounds.	
2776	bis(3,4-dichlorobenzyl)----- dichloride	75
	Pyrrolidinium compounds.	
2747	1-(o-chlorobenzyl)-1-methyl-2-(3-pyridyl)----- thiocyanate	93
2745	1-(2,4-dichlorobenzyl)-1-methyl-2-(3-pyridyl)----- chloride	90
2746	1-(3,4-dichlorobenzyl)-1-methyl-2-(3-pyridyl)----- chloride	80

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Monosubstituted	
	Nitriles	
4851	Acetonitrile, 2,4,6-trichlorophenyl-	96
7096	Cinnamonitrile, o-chloro-α-phenyl-	87
3214	Fumaronitrile, chloro-	91
5750	Malononitrile, o-chlorobenzylidene-	91
5765	-----, p-chlorobenzylidene-	(T)
3101	Propionitrile, 3-bromo-	43
5086	-----, 2-chloro-	45
3109	-----, 3-chloro-	46
5100	-----, 2,2,3-trichloro-	45
	Nitro Compounds	
4024	Benzene, 1,2-dichloro-4,5-dinitro-	99
6996	-----, 1,3-dichloro-4,6-dinitro-	98
3391	-----, 1,4-dichloro-2-nitro-	84
5193	-----, pentachloronitro-	71
5194	-----, 1,2,3,4-tetrachloro-5-nitro-	81
4876, 7111	-----, 1,2,4,5-tetracyloro-3-nitro-	79, 85
5551	-----, 1,2,4-trichloro-3,5-dinitro-	75
3064	Biphenyl, x-chloro-2-nitro-	90
6267	Butane, 1-(p-chlorophenyl)-1-(3,4-dichlorophenyl)-2-nitro-	48
4034	1-Butene, 1-(o-chlorophenyl)-2-nitro-	100
4040	-----, 1-(p-chlorophenyl)-2-nitro-	80
4086	-----, 1-(2,4-dichlorophenyl)-2-nitro-	94
4087	-----, 1-(3,4-dichlorophenyl)-2-nitro-	76
6266	Cyclohexane, 1,2-dibromo-4-nitro-5-phenyl-	26
5557	Stilbene, 2'-chloro-2,4,6-trinitro-	-26
4090	Styrene, β-bromo-β-nitro-	91
3813, 7152	-----, 2-chloro-β,4-dinitro-	89, 93
3811	-----, o-chloro-β-nitro-	98
3812	-----, p-chloro-β-nitro-	81
3814, 7153	-----, 2,4-dichloro-β-nitro-	70, 83
3815	-----, 3,4-dichloro-β-nitro-	81
	Phenols	
3526	x,x-Biphenol, octachloro-	94
7146*	Catechol, tetrachloro-	96
3605	p-Cresol, 2,6-dibromo-	80
3619	o-Cresol, 4,6-diiodo-	34
3571, 7277*	Hydroquinone, tetracyloro-	80, 83
4132	2-Naphthol, 1,6-dibromo-	91
5196	x_n-Phenanthrenepolyol, x_n-polychloro-	29

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Monosubstituted	
	Phenols	
4193	Phenol, 2-bromo-4-phenyl-	79
4870	-----, 2(and 4)-2-butenyl-4(and 2), 6-dichloro-	80
4543	-----, x-butyl-x,x,x,x-tetrachloro-	97
4262	-----, 2-chloro-4-cyclohexyl-	84
4263	-----, 4-chloro-2-cyclohexyl-	97
3165	-----, 4-chloro-2-(α-methylbenzyl)-	91
2938	-----, 4-chloro-2-phenyl-	98
2937	-----, x-chloro-2-phenyl-	99
2936	-----, x-chloro-4-phenyl-	85
4661	-----, 4,4'-cyclohexylidenebis[2,6-dichloro-	83
2977	-----, 2,4-dichloro-	76
2939	-----, 2,4-dichloro-6-phenyl-	86
4145	-----, 4,4'-isopropylidenebis[2-chloro-	87
7092	-----, 4,4'-isopropylidenebis[2,6-dichloro-	32
3055	-----, 2,2'-methylenebis[4,6-dichloro-	86
4381	-----, 3,3'-methylenebis[2,4,6-trichloro-	51
3385, 4206	-----, pentabromo-	88, 95
4509	-----, pentachloro-, diamminecopper(II) derivative	66
4510	rosinamminecopper(II) derivative	87
3500	zinc derivative	91
4869	-----, 2,3,5,6-tetrachloro-	94
4212	-----, 2,4,6-tribromo-	58
4657	-----, 2,2'-(2,2,2-trichloroethylidene)bis[6-bromo-4-chloro-	90
4382	-----, 2,2'-(2,2,2-trichloroethylidene)bis[4,6-dichloro-	98
6471	Pyrocatechol, 4-chloro-	79
3882	Thymol, 6-chloro-	76
3407	3,5-Xylenol, 4-bromo-	74
6392	2,6-Xylenol, 4-chloro-	61
6395	3,5-Xylenol, 2,2'-methylenebis[4,6-dichloro-	25
	Phosphorus Compounds	
3760	Phosphine oxide, tris(o-chlorophenyl)-	-10
3090	Phosphoric acid, bis(o-chlorophenyl)phenyl ester	93
3091	-----, o-chlorophenyldiphenyl ester	92
4187	-----, tris(o-chlorophenyl) ester	91
4110	-----, tris(2,3-dibromopropyl) ester	95
3946	-----, tris(pentachlorophenyl) ester	100
2878	Phosphorous acid, 2,4-dichlorobenzyldiethyl ester	85
4885	α-Toluenephosphonic acid, 2,4-dichloro-	78
4887	diethyl ester	67

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Monosubstituted	
	Phosphorus Compounds	
4886	α-Toluenephosphonic acid, 3,4-dichloro-	74
2879	diethyl ester	74
	Quinones	
3910	Anthraquinone, 2-chloro-	18
3630	p-Benzoquinone, 2,6-dichloro-	67
3438	-----, tetrabromo-	17
7285	Chloranil	37
3222	Diphenoquinone, octachloro-	94
	Sulfides	
3787	Disulfide, bis(p-chlorophenyl)	0
3297, 7117	Methane, bis(p-chlorophenylthio)-	71, 94
7116	Sulfide, 2-chloroethyl phenyl	98
	Sulfones	
4835	Sulfone, bis(p-chlorophenyl)	87
3458	-----, 2-chloroethyl dodecyl	19
3315	-----, 2-chloroethyl phenethyl	100
4809	-----, tert-butyl 2-chloroethyl	97
7073	Thionaphthene, 2-bromo-, 1,1-dioxide	86
7072	-----, 2,3-dibromo-2,3-dihydro-, 1,1-dioxide	92
	Sulfonic Acids	
5230	Benzenesulfonic acid, p-chloro-, p-bromophenyl ester	66
5228	p-chlorophenyl ester	71
5229	2,4-dichlorophenyl ester	28
7253	Phenol, 2,4-dichloro-, benzenesulfonate	74
6836	Sulfonic acid, trichlorovinyl-, x,x,x-trichloroethyl ester	82
	Thiocarbamates	
4528	Carbamic acid, o-bromophenyldithio-, ammonium salt	99
3050	-----, diethyldithio-, 2,4,6-trichlorobenzyl ester	96
5138	Carbamoyl chloride, diethylthio-	95
4471	Rhodanine, 5-(3,4-dichlorobenzylidene)-	86
	Thiocarbonates	
5170	Carbonic acid, thiol-, S-allyl O-pentachlorophenyl ester	88
3209	Xanthic acid, ethyl-, 2,4,6-trichlorobenzyl ester	96

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Monosubstituted	
	Thiocyanates	
4527	Isothiocyanic acid, x-bromophenyl ester	100
5442*	m-chlorophenyl ester	97
3859	Thiocyanic acid, 2,3,4,5,6-pentachlorocyclohexyl ester	90
	Thioureas	
5642*	2-Imidazoline, 2-[(o-chlorobenzyl)thio]-, hydrochloride	98
5643*	-----, 2-[(p-chlorobenzyl)thio]-, hydrochloride	97
5650	-----, 2-[(2,4-dichlorobenzyl)thio]-, picrate	89
5645	-----, 2-[(3,4-dichlorobenzyl)thio]-, 3,4-dichlorophenylsulfinate	98
5646	fluosilicate	66
5649	picrate	93
5644	thiocyanate	89
5451	Pseudourea, 2-(p-chlorobenzyl)-2-thio-, hydrobromide	95
5623	-----, 2-(2,4-dichlorobenzyl)-2-thio-, complex with crotonic acid	100
5625*	complex with 3,5-dichlorophenoxyacetic acid	99
5249	hydrochloride	97
5636	-----, 2-(3,4-dichlorobenzyl)-1,1-diphenyl-2-thio-, hydrochloride	60
5622	-----, 2-(3,4-dichlorobenzyl)-2-thio-, complex with formic acid	92
5626*	complex with 2-furoic acid	99
5624	complex with heptanoic acid	100
5627*	-----, 2-(3,4-dichlorophenyl)-2-thio-, complex with 1,2-ethanebis(thiocarbamic acid)	92
7089	-----, 2-pentachlorobenzyl-2-thio-, hydrochloride	98
7095	Urea, 1-(p-chlorophenyl)-3-methyl-2-thio-	100
5486	-----, 1-(m-chlorophenyl)-2-thio-	100
	Ureas	
5886	Carbanilide, 4,4'-dichloro-	-41
3453	Glycoluril, 1,3,4,6-tetrachloro-3a,6a-diphenyl-	64
5888	Hydantoin, 1,3-dibromo-5,5-dimethyl-	68
5885	-----, 1,3-dichloro-5,5-dimethyl-	97
5887	Urea, (p-chlorophenyl)-	80
	Miscellaneous	
6255	Aniline, N-(2,4-dichlorobenzylidene)-	42
5881	Benzamidine, p-chloro-, hydrochloride	87
3945	Benzenesulfinic acid, p-chloro-, sodium salt	89
4413	Benzenesulfonotoluidide, 4-bromo-	88

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Monosubstituted	
	Miscellaneous	
5213	Benzenethiol, pentachloro-	66
3996	Butyraldehyde, α,α,β-trichloro-	40
3668	3(2H)-Pyridazinone, 4,5-dichloro-2-phenyl-	74
7183	Sulfanilamide, N4-(bromoacetyl)-	38
	Disubstituted	
	Acid-Amides	
3451	Caproic acid, ε-benzamido-α-bromo-	85
5485	Maleanilic acid, 3-chloro-	80
7094	Phthalamic acid, N-(3,4-dichlorophenyl)-	91
	Acid-Ethers	
3325	Acetic acid, (4-chloro-o-tolyloxy)-	89
3291	-----, (2,4-dichlorophenoxy)-, nickel(II) salt	42
3029	-----, (pentachlorophenoxy)-	97
5010	-----, (2,3,5,6-tetrachlorophenoxy)-	88
4189	Propionic acid, α-(o-chlorophenoxy)-	19
	Acid-Heterocyclic Compounds	
4965, 5782	2-Furoic acid, 5-bromo-	83, 93
4966, 5783	-----, 5-chloro-	90, 95
7167	-----, 3,4-dichloro-	86
7264	Nicotinic acid, 5-fluoro-	34
	Acid-Phenols	
4191, 4322	Salicylic acid, 5-bromo-	93, 90
4463	-----, 5-chloro-	100
4462	-----, 3,5-dichloro-	98
	Alcohol-Amides	
5129*	Acetamide, 2-chloro-N-dodecyl-N-(2-hydroxyethyl)-	95
7214	-----, 2-(p-chlorophenyl)-N-(2-hydroxyethyl)-	69
7144*	2-Propanol, 3-benzamido-1,1,1-trichloro-	94
	Alcohol-Amines	
5111	Aniline, o-chloro-N,N-bis(2-hydroxypropyl)-	83
6559	Benzyl alcohol, o-chloro-α-(dioctylaminomethyl)-	91
6672	Ethanol, 2-(p-bromobenzylamino)-, hydrochloride	73
5105	-----, 2-(m-chloroanilino)-	81
5103	-----, 2-(o-chloroanilino)-	82
5333	-----, 2,2'-(m-chloroanilino)bis-	65
5120	-----, 2-(2,5-dichloroanilino)-	77

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Disubstituted	
	Alcohol-Amines	
6676	1-Naphthalenemethanol, 4-bromo-α-(dodecylaminomethyl)-	42
6669	-----, 4-chloro-α-(2-diethylaminoethyl)-, hydrochloride, hydrate	100
6640	-----, 2-chloro-α-(dihexylaminomethyl)-, hydrochloride	93
6670	-----, 2-chloro-α-(dipentylaminomethyl)-, hydrochloride	96
4813	2-Propanol, 1,1'-o-chloroanilinobis-	94
5334	-----, 1-chloro-3-(N-ethyl-m-toluidino)-	80
	Alcohol-Carbamates	
4749	Carbamic acid, 2,2,3-trichloro-1-hydroxybutyl-, butyl ester	92
5474	-----, 2,2,2-trichloro-1-hydroxyethyl-, isopropyl ester	25
	Alcohol-Ethers	
3944	Ethanol, 2-(pentachlorophenoxy)-	94
6441	1,2-Propanediol, 3-(p-chlorophenoxy)-	65
3386	2-Propanol, 1-(p-chlorophenoxy)-	64
	Alcohol-Heterocyclic Compounds	
6671	4-Morpholineethanol, α-(p-bromophenyl)-3-ethyl-, hydrochloride	92
4468	2-Pyridineethanol, α-(trichloromethyl)-	97
6318	4-Quinolinemethanol, 8-chloro-2-(p-chlorophenyl)-α-2-piperidyl-	92
	Alcohol-Nitro Compounds	
4470	Benzyl alcohol, 3,4-dichloro-α-1-nitroethyl-	87
7261	2-Butanol, 1,1,1-trichloro-3-nitro-	19
7142*, 7143	2-Propanol, 1,1,1-trichloro-3-nitro-	88, 97
	Alcohol-Phenols	
7100, 7291*	2,2'-Methylenebis(4-chloro-6-hydroxymethylphenol)	66, 75
6248	Saligenin, 5-chloro-	90
	Alcohol-Phosphorus Compounds	
4464	α-Toluenephosphonic acid, o-chloro-α-hydroxy-, diethyl ester	85
2980	-----, 2,4-dichloro-α-hydroxy-, diethyl ester	86

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Disubstituted	
	Alcohol-Quaternary Nitrogen Compounds	
	Ammonium compounds.	
4506	bis(2-hydroxyethyl)(2,4-dichlorobenzyl)hexadecyl----- chloride	97
4507	bis(2-hydroxyethyl)(3,4-dichlorobenzyl)hexadecyl----- chloride	88
4504	bis(2-hydroxyethyl)(2,4-dichlorobenzyl)tetradecyl----- chloride	99
4505	bis(2-hydroxyethyl)(3,4-dichlorobenzyl)tetradecyl----- chloride	99
	Imidazolium compounds.	
7005	1(or 3)-(4-chlorobutyl)-x-heptadecen-2-yl-1-(2-hydroxyethyl)-2------ chloride, 60 percent in isopropyl alcohol	97
	Alcohol-Ureas	
5891	Urea, 3,3-bis(2-hydroxyethyl)-1-(m-chlorophenyl)-	44
2994	-----, 1,3-bis(2,2,2-trichloro-1-hydroxyethyl)-	37
2993	-----, 1-(2,2,2-trichloro-1-hydroxyethyl)-	36
5890	-----, 3-(2,2,2-trichloro-1-hydroxyethyl)-1-m-tolyl-	62
	Amide-Amines	
4939	Acetamide, 2-(m-bromoanilino)-	95
4941	-----, 2-(m-chloroanilino)-	66
	Amide-Azo Compounds	
4442	Benzanilide, 4-chloro-4'-phenylazo-	25
4689	-----, 2,4-dichloro-4'-phenylazo-	16
	Amide-Esters	
4414	Oxanilic acid, 4'-chloro-, ethyl ester	73
5931	-----, 3'-chloro-, isopropyl ester	35
	Amide-Ethers	
3576	Acetamide, 2-(2,4-dichlorophenoxy)-	89
4912	Acetanilide, 3'-chloro-2-(pentachlorophenoxy)-	18
6131	o-Acetanisidide, 5'-chloro-	53
5039	p-Anisanilide, 4'-bromo-	50
4783, 4992	-----, 2'-chloro-	70, 21
4784, 4993	-----, 3'-chloro-	55, 53
4785, 4994	-----, 4'-chloro-	35, 59
4782, 4995	-----, 2',5'-dichloro-	-31, 51
6200	Benzanilide, 2'-bromo-2-ethoxy-	2
6201	-----, 4'-bromo-2-ethoxy-	-8

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Disubstituted	
	Amide-Ethers	
6197	Benzanilide, 2'-chloro-2-ethoxy-	-38
6198	-----, 3'-chloro-2-ethoxy-	-44
6199	-----, 4'-chloro-2-ethoxy-	-185
6202	-----, 2',5'-dichloro-2-ethoxy-	72
4438	o-Benzanisidide, 2,4-dichloro-	33
4453	p-Benzanisidide, 2-chloro-	82
4439	-----, 2,4-dichloro-	54
4911	-----, 3,4-dichloro-	15
	Amide-Ketones	
2922	Acetoacetanilide, 4'-chloro-	71
5749	-----, 4,4,4-trifluoro-	64
	Amide-Nitro Compounds	
4771	Benzanilide, 2-chloro-3'-nitro-	49
4772	-----, 2-chloro-4'-nitro-	46
4415	-----, 3'-chloro-3-nitro-	56
4446	-----, 4-chloro-2'-nitro-	64
4435	-----, 4-chloro-3'-nitro-	42
4747	-----, 4-chloro-4'-nitro-	56
4680	-----, 4'-chloro-4-nitro-	45
4431	-----, 2,4-dichloro-2'-nitro-	53
4904	-----, 2,4-dichloro-3'-nitro-	23
5769	Formanilide, 2'-chloro-4'-nitro-	96
	Amide-Phenols	
6501	Salicylamide, N-allyl-5-chloro-	99
6720	-----, N-benzyl-5-chloro-	83
6484	-----, 5-bromo-N,N-dimethyl-3-phenyl-	5
6506	-----, N-butyl-5-chloro-	99
6508	-----, N-sec-butyl-5-chloro-	98
6535, 6714	-----, N-tert-butyl-5-chloro-	99, 95
6534, 6713	-----, 5-chloro-	97, 95
6505	-----, 5-chloro-N-ethyl-	91
6717	-----, 5-chloro-N-heptyl-	96
6716	-----, 5-chloro-N-hexyl-	94
6503	-----, 5-chloro-N-isobutyl-	99
6502	-----, 5-chloro-N-isopropyl-	98
6500	-----, 5-chloro-N-methyl-	97
6718	-----, 5-chloro-N-octyl-	90
6715	-----, 5-chloro-N-pentyl-	93
6509	-----, 5-chloro-N-propyl-	98

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Disubstituted	
	Amide-Phenols	
6722	Salicylanilide, 5-chloro-	73
6780	-----, 4',5-dibromo-	75
6723	-----, 2',5-dichloro-	82
6724	-----, 3',5-dichloro-	92
6725	-----, 4',5-dichloro-	88
6726	-----, 2',5,5'-trichloro-	88
6731	Salicylo-m-toluidide, 5-chloro-	79
6730	Salicylo-o-toluidide, 5-chloro-	89
6732	Salicylo-p-toluidide, 5-chloro-	72
	Amine-Ethers	
4562	Aniline, 3-chloro-4-(p-chlorophenoxy)-, hydrochloride	96
4681	Triethylamine, 2-pentachlorophenoxy-	96
	Amine-Heterocyclic Compounds	
3472	Pyrimidine, 2-amino-4-chloro-6-methyl-	64
6633	Quinoline, 7-bromo-4-[[4-(diethylamino)-1-methylbutyl]amino]-, diphosphate	97
5609	s-Triazine, 2,4-bis[(1,1,3,3-tetramethylbutyl)amino]-6-chloro-	-2
5612	-----, 2,6-di(tert-butylamino)-4-chloro-	99
5611	-----, 4-chloro-2,6-di(isopropylamino)-	93
4925	-----, 4,6-diamino-2-chloro-	75
5614	-----, 2,4-diamino-6-chloro-	95
4794	-----, 2,4-dichloro-6-(o-chloroanilino)-	80
5613	-----, 2,6-dichloro-4-(cyclohexylamino)-	76
	Amine-Imides	
5265	Phthalimide, N-[(m-bromoanilino)methyl]-	38
6271	-----, 3,4,5,6-tetrachloro-N-[2-(diethylamino)ethyl]-	43
5264	-----, N-[(p-iodoanilino)methyl]-	37
	Amine-Ketones	
6677	Acetophenone, 2-[benzyl[(p-diethylamino)benzyl]-amino]-3',4'-dichloro-, dihydrochloride	61
6556	-----, 4'-bromo-2'-(N-methylanilino)-	32
6710	Ketone, 9(or 10)-bromo-3-phenanthryl (diethylamino)methyl	68
6641	Propiophenone, 3-(benzylmethylamino)-4'-chloro-, hydrochloride	88

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Disubstituted	
	Amine-Nitriles	
5091	Propionitrile, 3-(m-chloroanilino)-	71
5092	-----, 3-(o-chloroanilino)-	83
	Amine-Nitro Compounds	
4139	Aniline, 2-chloro-4-nitro-	86
4140	-----, 4-chloro-2-nitro-	88
3449	m-Toluidine, 2,6-diiodo-4-nitro-	60
	Amine-Quaternary Nitrogen Compounds	
	Ammonium compounds.	
4743	[4-[(o-chlorophenyl)[p-(dimethylamino)phenyl]methylene]-2,5-cyclohexadienylidene]dimethyl----- chloride	98
	Pseudoindolium compounds.	
4744	2-[4-[(2-chloroethyl)ethylamino]-2-methylstyryl]-1,3,3-trimethyl-3H------ chloride	99
4742	2-[p-[(2-chloroethyl)methylamino]styryl]-1,3,3-trimethyl-3H------ chloride	87
	Amine-Sulfones	
6636	Aniline, 3-chloro-4,4'-sulfonyldi-	81
2920	m-Toluidine, 6-ethylsulfonyl-, α,α,α-trifluoro-	71
	Carbamate-Esters	
6044	Carbanilic acid, 5-chloro-2-methyl-, 2-propynyl ester	80
4918	Lactic acid, carbanilate, 2-chloroethyl ester	79
5294	-----, m-chlorocarbanilate, 2-chloroethyl ester	93
5298	cyclohexyl ester	77
	Carbamate-Ethers	
4880	Carbanilic acid, 5-chloro-2-methoxy-, isopropyl ester	83
5255	-----, 2-methoxy-5-methyl-, 2-chloroethyl ester	95
4920	Ethanol, 2-(2,4-dichlorophenoxy)-, carbanilate	67
5256	m-chlorocarbanilate	73
6323	2-Propanol, 1-chloro-3-isopropoxy-, carbanilate	78
	Carbamate-Nitriles	
4915	Carbanilic acid, m-cyano-, 2-chloroethyl ester	83
6263	Hydracrylonitrile, m-chlorocarbanilate	52
	Ester-Ethers	
5201	Benzoic acid, o-ethoxy-, p-chlorophenyl ester	75
6296	Cinnamic acid, α-bromo-3,4-dimethoxy-, methyl ester	51

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Disubstituted	
	Ester-Ethers	
3103	Fumaric acid, bis[2-(2-chloroethoxy)ethyl] ester	57
6299	Hydrocinnamic acid, α-bromo-β,3,4-trimethoxy-, methyl ester	24
6297	-----, α,β-dibromo-3,4-dimethoxy-, methyl ester	26
3110	Maleic acid, bis[2-(2-chloroethoxy)ethyl] ester	81
3030	1,2-Propanediol, 3-pentachlorophenoxy-, diacetate	83
5207	Propanol, 3-(3-phenoxypropoxy)-, bromoacetate	84
	Ester-Heterocyclic Compounds	
6521*	2-Furoic acid, 2-chloroethyl ester	95
7168	-----, 3,4-dichloro-, ethyl ester	78
4846	-----, 2,3,4,5-tetrachlorotetrahydro-, butyl ester	100
6827	2-chloroethyl ester	100
6826	docosyl ester	10
6823	dodecyl ester	99
4859	ethyl ester	97
6824	hexadecyl ester	95
4845	methyl ester	100
6825	octadecyl ester	97
5162, 5386	octyl ester	100, 100
4847	propyl ester	100
5202	Piperonyl alcohol, p-chlorobenzoate	47
	Ester-Hydrazines	
4374	Carbazic acid, 2-(2,5-dichlorophenyl)-, isopropyl ester	58
4914	-----, 3-phenyl-, 2-chloroethyl ester	52
5554	-----, 3-(2,4,6-trichlorophenyl)-, isopropyl ester	90
	Ester-Ketones	
3088	Acetophenone, 2-bromo-3'-hydroxy-, benzoate	47
3089	-----, 2-bromo-4'-hydroxy-, benzoate	59
	Ester-Nitro Compounds	
4903	Benzoic acid, 2,4-dichloro-, o-nitrophenyl ester	18
4460	-----, p-nitro-, p-chlorophenyl ester	23
4878	Phenol, 2,3,5,6-tetrachloro-4-nitro-, acetate	87
	Ester-Sulfides	
4753	Acetic acid, chloro-, diester with 4,4'-thiodiphenol	90
5146	-----, pentachlorophenylthio-, methyl ester	80

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Disubstituted	
	Ester-Thiocarbamates	
5145	Acetic acid, dibutyldithiocarbamoyl-, p-chlorophenyl ester	72
5144	-----, diethyldithiocarbamoyl-, p-chlorophenyl ester	100
5444	Carbamic acid, dithio-, ethylenebis-S,S'-bis(2-bromoethoxycarbonyl)	83
	Ether-Heterocyclic Compounds	
4323	Propane, 3-(2,4,5-trichlorophenoxy)-1,2-epoxy-	82
4176	Pyran, 3-bromo-2-ethoxytetrahydro-	66
4174	-----, 3-bromotetrahydro-2-methoxy-	58
4175	-----, 3,4-dibromo-2-ethoxytetrahydro-	100
	Ether-Lactones	
3623	2(5H)-Furanone, 3,4-dichloro-5-dodecyloxy-	82
3632	-----, 5,5'-oxybis[3,4-dichloro-	65
	Ether-Nitriles	
5075	Acetonitrile, 2,4-dichlorophenoxy-	100
5080	Propionitrile, 3-(o-chlorophenoxy)-	84
	Ether-Nitro Compounds	
4877	Anisole, 2,3,5,6-tetrachloro-4-nitro-	83
4561	Ether, p-bromophenyl 2,4-dinitrophenyl	17
4786	-----, 4-tert-butyl-2-chlorophenyl 2,4-dinitrophenyl	23
4560	-----, p-chlorophenyl 2,4-dinitrophenyl	45
	Ether-Thiocyanates	
5676	Butanal, 3-chloro-, bis[2-(2-thiocyanatoethoxy)-ethyl] acetal	87
5667	Phenetole, p-chloro-β-thiocyanato-	100
	Ether-Thioureas	
5698	2-Imidazoline, 2-[2-(2-chloroethoxy)ethylthio]-	93
5430	hydrochloride	87
	Heterocyclic-Hydroxy Derivatives	
4149	4-Quinolinol, 5-chloro-	94
3051	8-Quinolinol, 5,7-dibromo-	15
6776	-----, 5,7-dichloro-, copper(II) derivative	34
3408	3-Thianaphthenol, 6-chloro-4-methyl-	76
	Heterocyclic-Nitro Compounds	
4372	1,3-Benzodioxan, 2,4-bis(trichloromethyl)-6-nitro-	63
3236	Carbazole, 3,6-dichloro-1,8-dinitro-	81

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Disubstituted	
	Heterocyclic-Nitro Compounds	
4082*	Furan, 2-(2-bromo-2-nitrovinyl)-	100
4968	-----, 2-chloro-5-nitro-	94
7151	-----, 5-chloro-2-(2-nitrovinyl)-	100
3983	Pyridine, 2-chloro-5-nitro-	76
	Heterocyclic-Sulfonamides	
3964	Morpholine, 4-(p-chlorophenylsufonyl)-	29
3963	-----, 4-(3,4-dichlorophenylsulfonyl)-	74
	Heterocyclic-Thioureas	
5652	2-Imidazoline, 2-[(6-chloro-1,3-benzodioxan-8-yl)-methylthiol]-	76
5651	hydrochloride	89
	Hydrazide-Nitro Compounds	
4956	Benzoic acid, p-nitro-, o-chlorobenzylidenehydrazide	55
4959	2,2,2-trichloroethylidenehydrazide	65
	Imide-Nitro Compounds	
6047	Phthalimide, N-(2-bromoethyl)-3-nitro-	87
6053	-----, N-(2-bromoethyl)-4-nitro-	82
6057	-----, N-(o-chlorobenzyl)-4-nitro-	100
6058	-----, N-(p-chlorobenzyl)-4-nitro-	87
	Imine-Phenols	
4983	Phenol, o-[(o-chlorobenzylidene)amino]-	67
4985	-----, o-[(p-chlorobenzylidene)amino]-	71
	Nitro-Phenols	
4489	Phenol, 2-bromo-4-tert-butyl-6-nitro-	86
3390	-----, 2-chloro-4,6-dinitro-	100
4777	-----, 2,2'-(2,2,2-trichloroethylidene)bis[4-chloro-6-nitro-	91
	Phenol-Sulfides	
4690	Phenol, 2,2'-thiobis[4-chloro-	95
5434	salt with 1 f. wt. dimethylamine	76
	Miscellaneous	
5147	Acetamide, N-butyl-2-(pentachlorophenylthio)-	51
5040	Acetanilide, 2,2,2-trichloro-4'-sulfamoyl-	91
5343	Acrylic acid, 3-(m-chloroanilino)-2-(ethoxycarbonyl)-, ethyl ester	46

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Disubstituted	
	Miscellaneous	
3132	Anthranilic acid, 3,5-dichloro-	56
3274	Anthraquinone, 1-benzamido-4-chloro-	7
5410	Benzenesulfonic acid, p-methoxy-, p-chlorophenyl ester	51
2909	Benzoic acid, o-(p-bromobenzoyl)-	76
4883	-----, 2,2'-dithiodi-, bis(2,4-dichlorobenzylidene-hydrazide)	19
4881	-----, o-mercapto-, 2,4-dichlorobenzylidenehydrazide	10
6620	Benzoin, 4,4'-dichloro-	72
3690, 5458	Benzothiazole, 5-chloro-2-mercapto-	75, 89
3774	1,3-Benzoxazine, 1-acetyl-2-trichloromethyl-4-oxo-	-50
7047	Butyraldehyde, α,α,β-trichloro-, and propionamide	95
7090	Carbamic acid, dimethyldithio-, 2-(2,4-dichlorophen-oxy)ethyl ester	73
5659	-----, thio-, 2-[2-(octadecylthio)-2-imidazolin-1-yl]-ethyl-, 3,4-dichlorobenzyl ester, hydrobromide	35
4113	Carbonic acid, 2,4,5-trichlorophenyl ester, diester with diethylene glycol	-42
6262	Cinnamic acid, p-chloro-α-cyano-	60
6673	o-Cresol, 6-bromo-4-tert-butyl-α-(dimethylamino)-	96
4427	-----, 4-chloro-α-morpholino-	60
4379	-----, 3,4,6-trichloro-α-(2,3,5-trichloro-6-methoxy-phenyl)-	42
7105	Cyclohexanone, 2-[(p-chlorophenyl)thio]-	97
3691	Ether, pentachlorophenyl 2-(phenethylthio)ethyl	83
6743	Fumaramic acid, N-carbamoyl-, 2-chloroethyl ester	65
3631	2(5H)-Furanone, 3,4-dichloro-5-hydroxy-, carbanilate	44
3790	-----, 3,4-dichloro-5-phenacyl-	91
5647	Imidazole, 4,5-dihydro-1-(2-aminoethyl)-2-[(3,4-dichlorobenzyl)thio]-, dihydrochloride	88
5660	2-Imidazoline, 1-[2-(3,4-dichlorobenzenesulfonamido)-ethyl]-2-[(3,4-dichlorobenzyl)thio]-	54
3459	Isocyanuric acid, trichloro-	97
4559	Isonicotinic acid, 2-chloro-, hydrazide	88
5832	Maleimide, N-(2-acetamidoethyl)-2,3-dichloro-	95
5830	-----, 2,3-dichloro-N-(2-methoxyethyl)-	97
5370	Mandelic acid, 2-chloroethyl ester	80
3784, 3909	Mucochloric acid	65, 76
3635	thiosemicarbazone	68
6711	Octadecanophenone, 2'-chloro-, 2,4-dinitrophenyl-hydrazone	-11
6385	Phosphonic acid, diimide, N,N'-bis(5-chloro-2-pyrimidinyl)-P-phenyl-	43

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Disubstituted	
	Miscellaneous	
2880	Phosphoric acid, 2-(2,4-dichlorophenoxy)ethyl diethyl ester	78
3712	Phthalimide, 1,2,3,6-tetrahydro-, N-trichloromethylthio-	57
6043	2-Propanol, 1,1,1-trichloro-3-nitro-, carbanilate	88
3233	Propionitrile, 3-(p-chlorophenylthio)-	97
5234	Propiophenone, 2-bromo-3',4'-dimethoxy-	66
3082	-----, 2,3-dibromo-4'-chloro-3-(3,4-methylenedioxyphenyl)-	6
5841	3,6-Pyridazinedione, 4,5-dichloro-1,2-dihydro-	79
5195	2-Pyridinecarbamic acid, 5-chloro-, isopropyl ester	55
	Pyridinium compounds.	
6317	1-(6-chloro-3-phenanthrylcarbonylmethyl)----- bromide	-36
4260	Salicylaldehyde, 3,5-dichloro-	96
4261	oxime	94
7110	Semicarbazide, 1-(p-chlorobenzoyl)-	18
6668	Sulfanilamide, N1-(5-bromo-2-pyrimidinyl)-	80
7104	Sulfide, p-chlorobenzyl 2-thienyl	93
5951	-----, 2-chlorocyclohexyl 2,4-dinitrophenyl	36
3231	Sulfone, p-chlorophenyl cyanomethyl	91
3272	Sulfoxide, 2-chloroethyl 2,4-dinitrophenyl	93
5004	Thiazole, 2-(2,2,2-trichloroacetamido)-	64
5669	Thiocyanic acid, 3-chloro-4-(dimethylamino)phenyl ester	100
3842	Thiophene, 5-chloro-2-(1,2-dithiocyanatoethyl)-	55
5089	p-Toluenesulfonanilide, 3-chloro-N-(2-cyanoethyl)-	84
5918	Urea, 1,1-bis(2-hydroxyethyl)-3-(m-chlorophenyl)-, bis(m-chlorocarbanilate)	36
	Polysubstituted	
3970	Acetic acid, diethyldithiocarbamoyl-, 2-(pentachlorophenoxy)ethyl ester	97
3965	-----, thiocyanato-, 2-(pentachlorophenoxy)-ethyl ester	85
4119	Acetoacetic acid, 2-(2,2,2-trichloro-1-hydroxyaminoethyl)-, ethyl ester	45
6642	Acetophenone, 2-(benzylmethylamino)-3'-chloro-4'-ethoxy-, hydrochloride	87
2995	-----, 4'-[(2,2,2-trichloro-1-hydroxyethyl)amino]-	71
6555	Acridine, 6-chloro-9-[β-[2-(diethylamino)ethyl]phenethylamino]-2-methoxy-, dihydrochloride	95

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Polysubstituted	
6644	Acridine, 6-chloro-9-[α-[3-(diethylamino)propyl]phenethylamino]-2-methoxy-, dihydrochloride, trihydrate	98
6646	-----, 6-chloro-9-[[4-(diethylamino)-1-(4-pyridyl)-butyl]amino]-2-methoxy-, trihydrochloride, monohydrate	98
6560	-----, 6-chloro-9-[β-[2-(dimethylamino)ethyl]phenethylamino]-2-methoxy-, dihydrochloride	88
7226	9-Acridone, 3-chloro-7-methoxy-	10
4935	o-Anisidineethanol, α-chloromethyl-	67
7224	Anthranilic acid, 4-chloro-N-(p-methoxyphenyl)-	69
3452	Benzoic acid, 6-benzoyl-3-chloro-2-nitro-	84
6558	Benzyl alcohol, α-(benzylethylaminomethyl)-3-chloro-4-ethoxy-, hydrochloride	92
6557	-----, 3-chloro-4-ethoxy-α-(phenethylaminomethyl)-, hydrochloride	66
5432	o-Cresol, 6,6'-thiobis[4-chloro-α-(dimethylamino)-	97
3675	Crotonic acid, α-anilino-β-chloro-γ-hydroxy-γ-methoxy-, γ-lactone	34
4752	Ethanol, 1-(4-amino-6-phenyl-s-triazin-2-ylamino)-2,2,2-trichloro- and s-Triazine, 2,4-bis(2,2,2-trichloro-1-hydroxyethylamino)-6-phenyl-	25
6674	-----, 2-(3-bromo-5-tert-butyl-2-hydroxybenzylamino)-	98
6675	-----, 2-(5-tert-butyl-3-chloro-2-hydroxybenzylamino)-	100
6094	-----, 2-[N-(3-chloroallyl)-5-chloro-3-methoxyanilino]-	80
4932	-----, 2-(2-chloro-3,5-dinitrobenzenesulfonamido)-	93
6316	-----, 2-[[4-(7-chloro-4-quinolylamino)pentyl]ethylamino]-, monosulfate	99
4469	-----, 2,2,2-trichloro-1-salicylamido-	80
5301	Furfuryl alcohol, 5-nitro-, bromoacetate	89
2754	chloroacetate	70
5300	p-chlorobenzoate	30
5302	x-chloropropionate	78
6298	Hydracrylic acid, 2-bromo-3-(3,4-dimethoxyphenyl)-, methyl ester	9
5936	Lactic acid, m-chlorocarbanilate-, 2-(2,4-dichlorophenoxy)ethyl ester	74
5997	-----, m-methylcarbanilate-, 2-(2,4-dichlorophenoxy)-ethyl ester	48
3969	Morpholinocarbodithioic acid, ester with 2-(pentachlorophenoxy)ethyl mercaptoacetate	78
5678	Phosphonic acid, (2,2,3-trichloro-1-hydroxybutyl)-, bis[2-(2-thiocyanatoethoxy)ethyl] ester	84
5679	-----, (2,2,2-trichloro-1-hydroxyethyl)-, bis[2-(2-thiocyanatoethoxy)ethyl] ester	84

TABLE I

Code No.	Classification and Name	K Value
	HALIDES	
	Polysubstituted	
5620	Piperazone, 4-[4,6-bis(chloroamino)-s-triazin-2-yl]-1-chloro-3,3-dimethyl-	92
6667	2-Propanol, 1-(7-chloro-4-quinolylamino)-3-diethylamino-, diphosphate	97
5293	Propionitrile, 3-(2-hydroxyethoxy)-, m-chlorocarbanilate	63
5233	Propiophenone, 3-chloro-4'-hydroxy-3'-methoxy-	77
6067	Quinocrine, salt with 1 f. wt. sulfamic acid	82
3721	Quinoline, 5-bromo-6-methoxy-8-nitro-	-7
5996	3-Quinolinecarboxylic acid, 7-chloro-4-hydroxy-	59
3984	-----, 8-chloro-4-hydroxy-7-methyl-, ethyl ester	28
6319	4-Quinolinemethanol, 7-chloro-2-(p-chlorophenyl)-α-(diethylaminomethyl)-, hydrochloride	94
6320	-----, 3-(p-chlorophenyl)-α-(diethylaminomethyl)-6-methoxy-	75
	Quinolinium compounds.	
6069	4-chloro-2-[p-(dimethylamino)phenyliminomethyl]-6-methoxy-1-methyl----- chloride	89
6719	Salicylamide, 5-chloro-N-(2-hydroxyethyl)-	84
6721	-----, 5-chloro-N-(3-hydroxypropyl)-	94
6727	Salicylanilide, 5-chloro-2'-nitro-	95
6728	-----, 5-chloro-3'-nitro-	97
6729	-----, 5-chloro-4'-nitro-	99
6472	Salicylic acid, 5-bromo-3-phenyl-, 2-(diisopropylamino)ethyl ester, hydrochloride	71
6487	-----, 5-iodo-3-phenyl-, 2-(diisopropylamino)ethyl ester, hydrochloride	65
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
6543	Acetamide, N-[2-(2-heptadecyl-2-imidazolin-1-yl)-ethyl]-, acetate	57
5648	-----, 2-[(2-imidazolin-2-yl)thio]-, picrate	96
4017	Acetic acid, (3,6-dioxo-2-phenyl-1,2,3,4-tetrahydropyridazin-4-yl)-	-5
2935	-----, (1,4-methano-1,2,3,4-tetrahydrophthalimido)-	67
3655	-----, [(1-piperidyl)carbodithio]-	83
6555	Acridine, 6-chloro-9-[β-[2-(diethylamino)ethyl]phenethylamino]-2-methoxy-, dihydrochloride	95
6644	-----, 6-chloro-9-[α-[3-(diethylamino)propyl]phenethylamino]-2-methoxy-, dihydrochloride, trihydrate	98

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
6646	Acridine, 6-chloro-9-[[4-(diethylamino)-1-(4-pyridyl)-butyl]amino]-2-methoxy-, trihydrochloride, monohydrate	98
6560	-----, 6-chloro-9-[β-[2-(dimethylamino)ethyl]phenethylamino]-2-methoxy-, dihydrochloride	88
7226	9-Acridone, 3-chloro-7-methoxy-	-10
4827	Acrylamide, N-(phthalimidomethyl)-	61
4015	Allantoin	16
5276	Alloxan	40
5280	Alloxantin	33
	Ammonium compounds.	
5545	hexadecyl[2-[(p-methoxybenzyl)-2-pyrimidinyl-amino]ethyl]dimethyl----- bromide	82
6480	Antazoline, salt with methanesulfonic acid	74
5077, 6066	1-Aziridinepropionitrile	61, 42
6631	Barbituric acid, 5-ethyl-1-phenyl-	46
3014	Benzenearsonic acid, p-(1-piperidylsulfonyl)-	56
2859	Benzenesulfonamide, p-1-pyrrolyl-	51
7198	Benzenesulfonic acid, p-(4,5-dihydro-3-methyl-5-oxopyrazol-1-yl)-	51
3651	Benzimidazole	70
6698	-----, 1-acetyl-2-amino-, hydrochloride	56
7120	-----, 2-(2-benzoylethyl)-	65
7276	-----, 2-benzyl-	69
4059	-----, 2-[(ethoxycarbonyl)thio]-	97
4153	-----, (2-naphthenyl)-	87
4053	2-Benzimidazolethiol, copper(II) derivative	96
4054	zinc derivative	92
3446	11H-Benzo[a]carbazole, potassium salt	80
6697	p-Benzoquinone, 2,5-bis(2-pyridylamino)-	21
4705*	4(3H)-Benzotriazinone	100
7254*	-----, 3-butyl-	95
7254A	-----, 3-phenyl-	67
2737	1H-Benzotriazole, 6-nitro-	86
5844	Bicyclo[2.2.1]hept-5-ene-2,3-dicarboximide, N-ethyl-	79
5851	-----, N-(2-ethylhexyl)-	83
5845	-----, 1,4,5,6,7,7-hexachloro-N-ethyl-	74
2934	-----, 1,2,3,4,7,7-hexachloro-N-pentyl-	-65
5394	-----, N-(p-hydroxyphenyl)-	81
2982	-----, N-pentyl-	78
2855	Butyric acid, 3-indolyl-	63
5979	-----, 4-phthalimido-	83
4238	Caffine, tetrahydro-	96

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
4926	Caproic acid, ε-amino-, lactam	77
6451	Carbamic acid, dithio-, [2-(2-thioxoimidazolidin-1-yl)-ethyl]-, sodium salt, trihydrate	71
5659	-----, thio-, 2-[2-(octadecylthio)-2-imidazolin-1-yl)-ethyl]-, 3,4-dichlorobenzyl ester, hydrochloride	35
6763	-----, thiol-, maleimidomethyl-, butyl ester	99
3238	Carbazole, 3-chloro-	72
3237	-----, 3,6-dichloro-	64
3236	-----, 3,6-dichloro-1,8-dinitro-	81
3475	-----, 3-nitro-9-nitroso-	41
3476	-----, 9-nitroso-, crude	74
3235	-----, 1,3,6,8-tetranitro-, crude	91
3223	-----, N-vinyl-	97
3782	9-Carbazolylpropionitrile	43
4048	Carbonic acid, trithio-, bis(2-benzimidazolyl) ester	86
3781	Carbostyril, 1-methyl-	86
3229	-----, 4-methyl-	100
3718	Cinchonine, salt with 1 f. wt. mandelic acid	96
3061	Citraconimide	98
2952	-----, N-phenyl-	94
2954	-----, N-p-tolyl-	97
2992	Cyanuric chloride	63
5542	1H-Cyclopenta[b]quinoxaline-1,3-dicarboxylic acid, 2,3-dihydro-, diethyl ester	42
5328	Decanediamide, N,N'-diethylene-	-12
4245	1,4-Diazaspiro[4.5]deca-1,3-diene, 2,3-diphenyl-	88
6270	Dibenzo[f.h]quinoxaline	11
7219	Disulfide, bis(5-nitroquinol-8-yl)	11
6230	Doxylamine, succinate	91
4752	Ethanol, 1-(4-amino-6-phenyl-s-triazin-2-ylamino)-2,2,2-trichloro- and s-Triazine, 2,4-bis(2,2,2-trichloro-1-hydroxyethylamino)-6-phenyl-	25
6316	-----, 2-[[4-(7-chloro-4-quinolylamino)pentyl]ethylamino]-, monosulfate	99
5695	-----, 2-(2,6-diamino-s-triazin-4-ylthio)-	46
5741	-----, 2-(2-heptadecylimidazol-1-yl)-	(T)
5658	-----, 2-[(2-imidazolinyl)thio]-, hydrochloride	74
5654	Ether, bis[2-[(1-propionyl-2-imidazolin-2-yl)thio]ethyl]	70
2701	Ethylenimine	80
2949	Glutarimide	20
2941	-----, N-ethyl-	72
2950	-----, N-phenyl-	63

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
5454	Glycolic acid, [(4,5-dihydro-2-imidazolyl)thio]-, hydrochloride	48
4324	Glycoluril	27
3453	-----, 1,3,4,6-tetrachloro-3a,6a-diphenyl-	64
4327	-----, 1,3,4,6-tetrakis(hydroxymethyl)-	57
5190	Guanazole, salt with ½ f. wt. oxalic acid	70
6632	Guanidine, (2-benzimidazolyl)-	100
5192	-----, 1H-tetrazol-5-yl-	93
6099	Hexahydro-vic-triazine, 1,2,3-triacrylyl-	97
6272	Homophthalimide, N-phenyl-	16
5794	Hydantoin, 1-amino-, monohydrochloride	87
5888	-----, 1,3-dibromo-5,5-dimethyl-	68
5885	-----, 1,3-dichloro-5,5-dimethyl-	97
6645	-----, 5-phenyl-5-(phenylthiomethyl)-	73
4548	Hydrazine, 1-(10-undecenoyl)-2-(4-pyridylcarbonyl)-	100
3660	Hydrosulfamine, N-cyclohexyl-S-(1-piperidylthiocarbonyl)-	82
2910	Hydrouracil, 6-imino-5-isonitroso-	-35
5647	Imidazole, 4,5-dihydro-1-(2-aminoethyl)-2-[(3,4-dichlorobenzyl)thio]-, dihydrochloride	88
6801	-----, 1-(2-hydroxyethyl)-	51
7218	2-Imidazolethiol, 1-ethyl-	83
6405*	Imidazolidine, 1,3-bis(3,5,5-trimethylhexyl)-2-(2,4,4-trimethylpentyl)-	92
4075	-----, 2-heptadecyl-, acetate	66
3925	-----, 1,2,3-triphenyl-	73
2775	2-Imidazolidinethione	66
3646	-----, 1,3-diphenyl-	5
5455	-----, 1-methyldithiocarbonyl-	91
6397	2-Imidazolidinone, 1-(2-aminoethyl)-	6
6398	-----, 1,3-bis(3,5,5-trimethylhexyl)-	89
6396	-----, 1-(2-hydroxyethyl)-	-37
3218	-----, 2-thio-	54
4325	2-Imidazolidone	48
4476	-----, 1,3-bis(methoxymethyl)-	21
5152	2-Imidazoline, 1-(2-aminoethyl)-2-heptadecyl-	96
5652	-----, 2-[(6-chloro-1,3-benzodioxan-8-yl)methylthiol]- hydrochloride	76
5651		89
5642*	-----, 2-[(o-chlorobenzyl)thio]-, hydrochloride	98
5643*	-----, 2-[(p-chlorobenzyl)thio]-, hydrochloride	97
5698	-----, 2-[2-(2-chloroethoxy)ethylthio]- hydrochloride	93
5430		87
5637	-----, 2-decylthio-, hydrobromide	83
5660	-----, 1-[2-(3,4-dichlorobenzenesulfonamido)ethyl]-2-[(3,4-dichlorobenzyl)thio]-	54

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
5645	2-Imidazoline, 2-[(3,4-dichlorobenzyl)thio]-, 3,4-dichlorophenylsulfinate	98
5646	fluosilicate	66
5649	picrate	93
5644	thiocyanate	89
5650	-----, 2-[(2,4-dichlorobenzyl)thio]-, picrate	89
3537	-----, 1-dodecyl-2-methyl-	96
4487*	-----, 2-dodecylthio-	89
4750	-----, 2,2'-ethylenebis(oxyethylenethio)di-, dihydrochloride	71
5653	-----, 2,2'-ethylenedithiobis-, dihydrobromide	90
3328	-----, 2-(x-heptadecenyl)-	86
5655	-----, 2-[[2-(imidazolin-2-ylthio)-1-vinylethyl]thio]-, dihydrochloride	88
5431	-----, 1-(methoxymethyl)-2-(methoxymethylthio)-	50
3036	-----, 2-methyl-	48
4151	-----, 2-naphthenyl-	85
5641	-----, 2-octadecylthio-	62
5657	-----, 2-[[2-[2-(p-octylphenoxy)ethoxy]ethyl]thio]-, hydrochloride	85
5656	-----, 2-[[2-[2-phenoxyethoxy)ethyl]thio]-	76
5639	-----, 2-tetradecylthio-	94
3874	-----, 2,4,5-tri(2-furyl)-	98
5638	-----, 2-[(5,5,7-trimethyl-2-octenyl)thio]-, hydrochloride	97
3034, 5151 5740	-----, 2-undecyl-	81, 93 80
4318, 7006*	1-Imidazolineethanol, x-heptadecen-2-yl-	86, 99
4319	-----, 2-heptadecyl-	90
4317	-----, 2-tridecyl-	90
5805	2-Imidazoline-1-ethanol, 2-(x-heptadecenyl)-, carbanilate	81
4096	2-Imidazolineethanol, with 2-decyl and 2-dodecyl acetates	93
	Imidazolium compounds.	
6998*	1(or 3)-benzyl-2-coco-1-(2-hydroxyethyl)-2- ----- chloride, 60 percent in isopropyl alcohol	92
7000*	1(or 3)-benzyl-x-heptadecen-2-yl-1-(2-hydroxyethyl)-2- ----- chloride, 60 percent in isopropyl alcohol	92
7138*	3-benzyl-1-methyl-2-undecyl----- bromide	99
7005	1(or 3)-(4-chlorobutyl)-x-heptadecen-2-yl-1-(2-hydroxyethyl)-2------ chloride, 60 percent in isopropyl alcohol	97
4467	2(3H)-Imidazolone, 4,5-diphenyl-	100
2917	Indole	74

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
7273	2-Indolecarboxylic acid, ethyl ester	76
3674	Isatin	44
3611	-----, 1-acetyl-	17
3614	-----, 5,7-dinitro-	96
3414	-----, 7-methyl-	81
5994	Isobarbituric acid, 5-thio-	47
3459	Isocyanuric acid, trichloro-	97
7102	-----, triphenyl-	88
4247	Isoimidazole, 2,2-dibenzyl-4,5-diphenyl-, monohydrate	-24
4244	2H-Isoimidazole, 2,2-dimethyl-4,5-diphenyl-	94
4246	-----, 2,2,4,5-tetraphenyl-	-54
6061	Isoniazid	80
4544	Isonicotinamide, N-(3-guanylguanidino)-	90
4559	Isonicotinic acid, 2-chloro-, hydrazide	88
4492	-----, 2,6-dihydroxy-	49
6238	Isoquinoline, 8-[[3-(diethylamino)propyl]amino]-, dihydrochloride	96
6289	-----, 1-[[3-(dihexylamino)propyl]amino]-, dihydrochloride	91
	Isoquinolinium compounds.	
3416	2-dodecyl----- p-toluenesulfonate	95
3062	Itaconimide	85
6225	Lepidine, 8-[[2-(diethylamino)ethyl]amino]-6-methoxy-, dihydrochloride	95
6226	-----, 6-methoxy-8-[[1-methyl-4-(propylamino)butyl]-amino]-, dihydrochloride	87
	Lepidinium compounds.	
4020	1-isopentyl-α-[1-isopentyl-4(1H)-quinolylidene]- ----- iodide	-6
6449	Levopimaric acid, addition product with N-phenyl-maleimide	-42
3170, 6733	Maleimide	99
5832	-----, N-(2-acetamidoethyl)-2,3-dichloro-	95
7009	-----, N-acetoxymethyl-	95
5823	-----, N-allyl-2,3-dichloro-	100
5768	-----, N-anilino-	68
5833	-----, N-benzyl-2,3-dichloro-	55
6764	-----, N-benzylideneamino-	73
4811, 5113	-----, N-butyl-	100, 100
6741	-----, N-tert-butylcarbamoyl-	85
6740	-----, N-carbamoyl-	87
3808	-----, N-(m-chlorophenyl)-	73
3807	-----, N-(o-chlorophenyl)-	80
3809	-----, N-(p-chlorophenyl)-	84

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
5835	Maleimide, 2,3-dichloro-N-cyclohexyl-	56
5829	-----, 2,3-dichloro-N-decyl-	89
5825	-----, 2,3-dichloro-N-ethyl-	100
5831	-----, 2,3-dichloro-N-(2-ethylhexyl)-	92
5828	-----, 2,3-dichloro-N-hexyl-	98
5827	-----, 2,3-dichloro-N-isobutyl-	100
5830	-----, 2,3-dichloro-N-(2-methoxyethyl)-	97
5824	-----, 2,3-dichloro-N-methyl-	100
5834	-----, 2,3-dichloro-N-phenethyl-	33
5453	-----, 2,3-dichloro-N-phenyl-	24
5826	-----, 2,3-dichloro-N-propyl-	98
5837	-----, 2,3-dichloro-N-(m-tolyl)-	19
5836	-----, 2,3-dichloro-N-(o-tolyl)-	77
5838	-----, 2,3-dichloro-N-(p-tolyl)-	51
2968	-----, N-dodecyl-	87
3113	-----, N-ethyl-	79
6738*	-----, N-hydroxymethyl-	99
6734	-----, N-isopropyl-	83
3112, 4326	-----, N-methyl-	100, 100
3786, 6735*	-----, N-phenyl-	81, 98
6736	-----, N,N'-(1,3-phenylene)bis-	76
6737*	-----, N-propionyloxymethyl-	98
6759*	-----, N-thiocyanatomethyl-	99
3810, 5840	-----, N-o-tolyl-	92, 98
2965	-----, N-p-tolyl-	51
5327	Maleinimide, N-m-[bis(2-hydroxyethyl)amino]phenyl-	-3
7265	Malonic acid, 3-indolylmethyl-	20
4738	Melamine, N^2,N^2-bis(2-methylallyl)-	83
4485*	-----, N^2,N^2-dimethyl-	95
4733	-----, N^2-phenyl-	54
3654	-----, N^2,N^4,N^6-tris(2-benzothiazolylthiomethyl)-	3
7268	Mesitol, α^2-(2-pipecolino)-, hydrochloride	95
3422	Metanicotine	91
6232	Metrazole	91
6414	1,5-Naphthalenedisulfonic acid, 4-(2-mercapto-4,4,6-trimethyl-1(4H)-pyrimidinyl)-	59
6413	2-Naphthalenesulfonic acid, 5-(2-mercapto-4,4,6-trimethyl-1(4H)-pyrimidinyl)-	23
5239	2-Naphthol, 1-(piperidinomethyl)-	99
5766	Naphthostyril, 5-nitro-	99
3424	Nicotinamide, N-cyclohexyl-	51
6638	Nicotinanilide, 4'-sulfanilyl-	64

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
2772	Nicotine, compound with 1/3 f. wt. aluminium(III) picrate	36
2770	compound with ½ f. wt. cadmium(II) benzoate	90
3002	compound with ½ f. wt. cadmium(II) o-benzoyl-benzoate, trihydrate	100
2764	compound with ½ f. wt. cadmium(II) salicylate and 1 f. wt. salicylic acid, monohydrate	95
3006	compound with ½ f. wt. cadmium(II) thiocyanate	100
3063	compound with ½ f. wt. cadmium(II) thiocyanate and 1 f. wt. thiocyanic acid	99
3003	compound with ½ f. wt. cobalt(II) o-benzoyl-benzoate, trihydrate	100
2765	compound with ½ f. wt. cobalt(II) salicylate and 1 f. wt. salicylic acid, monohydrate	91
3009	compound with ½ f. wt. cobalt(II) thiocyanate and 1 f. wt. thiocyanic acid	99
2771	compound with ½ f. wt. copper(II) benzoate, mono-hydrate	98
3001	compound with ½ f. wt. copper(II) o-benzoyl-benzoate, and 1 f. wt. o-benzoylbenzoic acid	94
2763	compound with ½ f. wt. copper(II) fumarate, penta-hydrate	99
2762	compound with 1 f. wt. copper(II) phthalate and 1 f. wt. phthalic acid, hydrate	100
3004	compound with 1 f. wt. copper(II) thiocyanate	100
3007	compound with ½ f. wt. copper(II) thiocyanate and 1 f. wt. thiocyanic acid	100
2767	compound with ½ f. wt. manganese(II) salicylate and 1 f. wt. salicylic acid, monohydrate	96
3008	compound with ½ f. wt. manganese(II) thiocyanate and 1 f. wt. thiocyanic acid	92
2768	compound with ½ f. wt. nickel(II) salicylate and 1 f. wt. salicylic acid, monohydrate	93
3005	compound with 1/3 f. wt. nickel(II) thiocyanate	99
2761	compound with 2 f. wt. zinc oxalate and 1 f. wt. oxalic acid, pentahydrate	94
2769	compound with ½ f. wt. zinc salicylate and 1 f. wt. salicylic acid, monohydrate	79
2774	compound with ½ f. wt. zinc thiocyanate	96
2773	compound with 1 f. wt. zinc thiocyanate and 1 f. wt. thiocyanic acid	89
7264	Nicotinic acid, 5-fluoro-	34

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
	Nicotinium compounds.	
2776	bis(3,4-dichlorobenzyl)----- dichloride	75
2751	dibutyl----- dibromide	42
2804	didodecyl----- dipicrate	87
2807	diethylenebis----- dibromide	93
2741	dimethyl----- dibromide	7
2742	dimethyl----- diiodide	53
2784	dimethyl----- di-p-toluenesulfonate	52
5846	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboximide, N-ethyl-	54
5879	-----, N-1-naphthyl-	32
5944	7-Oxabicyclo[2.2.1]heptane-2-carboxylic acid, 3-(4H-1,2,4-triazol-3-ylcarbamoyl)-	58
5615	2-Pentanone, 4-(4,6-diamino-s-triazin-2-yl)-4-methyl-	68
4329	4-Penten-2-one, 3,3-bis[2-(4,6-diamino-s-triazin-2-yl)-ethyl]-4-methyl-	40
3853	6(5H)-Phenanthridinone	27
6063	2-Phenazinol, 8-amino-7-methyl-	20
5118	Phenol, p-(1,5-diphenyl-2-pyrazolin-3-yl)-	57
6569*	Phosphine oxide, tris(1-aziridinyl)-	100
6450*	Phosphine sulfide, tris(1-aziridinyl)-	93
6979	1,4-Phthalazinedione, 5-amino-2,3-dihydro-	42
6046	-----, 2,3-dihydro-5-(p-nitrobenzamido)-	-2
4305	1(2H)-Phthalazone, 4-methyl-2-phenyl-	69
5973	Phthalic acid, 3-nitro-, hydrazide	29
3708	Phthalimide	30
4817	-----, 4-acetamido-	56
2948	-----, N-allyl-	94
4818	-----, o-amino-	66
6478	-----, N-(5-amino-2-methylbenzyl)-	20
5262	-----, N-(anilinomethyl)-	60
3346	-----, N-benzyl-	48
5266	-----, N-[(4-biphenylamino)methyl]-	32
5687	-----, N-[bis(p-chlorophenyl)methyl]-	65
5265	-----, N-[(m-bromoanilino)methyl]-	38
5338, 5975	-----, N-(2-bromoethyl)-	59, 84
7058	-----, x-(2-bromoethyl)-	93
6047	-----, N-(2-bromoethyl)-3-nitro-	87
6053	-----, N-(2-bromoethyl)-4-nitro-	82
3722	-----, N-(3-bromopropyl)-	70
3260, 4861	-----, N-butyl-	85, 97
6051	-----, N-butyl-3-nitro-	84
6057	-----, N-(o-chlorobenzyl)-4-nitro-	100

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
6058	Phthalimide, N-(p-chlorobenzyl)-4-nitro-	87
4412	-----, N-(m-chlorophenyl)-	26
5977	-----, N-(3-cyanopropyl)-	80
2963	-----, N-decyl-	83
2925	-----, N-dodecyl-	-17
6324	-----, N-dodecyl-4-nitro-	98
5261	-----, N-[(p-ethoxyanilino)methyl]-	-7
2928, 4384	-----, N-ethyl-	54, 90
5976	-----, N,N'-ethylenebis-	52
5980	-----, N-ethyl-3-nitro-	87
3114	-----, N-hexyl-	90
5985	-----, N-hexyl-3-nitro-	49
6055	-----, N-hexyl-4-nitro-	58
3257	-----, N-2-hydroxyethyl-	46
4731	oleate	8
4732	stearate	-116
6050	-----, N-(3-hydroxy-4-hexenyl)-	76
5987	-----, N-(3-hydroxy-3-methylbutyl)-	76
6049	-----, N-(3-hydroxy-3-methylpentyl)-	71
5529	-----, N-(o-hydroxyphenyl)-	44
5264	-----, N-[(p-iodoanilino)methyl]-	37
2960	-----, N-isobutyl-	97
6045	-----, N-isobutyl-3-nitro-	55
2947, 4385	-----, N-isopropyl-	77, 100
5983	-----, N-isopropyl-3-nitro-	81
5268	-----, N-[(p-methoxyanilino)methyl]-	71
2927	-----, N-methyl-	62
5269	-----, N-[p-(methylcarbamoyl)anilinomethyl]-	74
5974	-----, N-(1-methylheptyl)-	41
5981	-----, N-methyl-3-nitro-	72
6424	-----, N-(3-methylpyrid-2-yl)-	91
6433	-----, N-(6-methylpyrid-2-yl)-	77
5259	-----, N-(morpholinomethyl)-	69
5392	-----, N-(1-naphthyl)-	50
3606	-----, N-(2-naphthyl)-	45
6274	-----, 4-nitro-	87
5984	-----, 3-nitro-N-octyl-	59
6056	-----, 4-nitro-N-octyl-	94
5986	-----, 3-nitro-N-pentyl-	93
6052	-----, 3-nitro-N-phenethyl-	66
4387	-----, N-(m-nitrophenyl)-	63
6048	-----, 3-nitro-N-(2-phthalimidoethyl)-	-59
6054	-----, 4-nitro-N-(2-phthalimidoethyl)-	36

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
5982	Phthalimide, 3-nitro-N-propyl-	93
2924, 4359	-----, N-octyl-	65, 88
5424	-----, N-(9-oxofluoren-2-yl)-	-17
2967	-----, N-pentyl-	95
4306	-----, N-phenacyl-	21
3258	-----, N-phenyl-	-6
2923	-----, N-propyl-	71
5686	-----, tetrachloro-	95
6271	-----, 3,4,5,6-tetrachloro-N-[2-(diethylamino)ethyl]-	43
5843	-----, 1,2,3,6-tetrahydro-, N-ethyl-	89
3712	-----, 1,2,3,6-tetrahydro-, N-trichloromethylthio-	57
5260	-----, N-(m-toluidinomethyl)-	16
2962, 5530	-----, N-m-tolyl-	-277, 44
2961, 3607	-----, N-o-tolyl-	50, 54
2926	-----, N-p-tolyl-	-9
5263	-----, N-(2,4-xylidinomethyl)-	88
5267	-----, N-(2,5-xylidinomethyl)-	70
6126	2-Picoline, 6-acetamido-	85
6236	-----, 6-amino-	93
6712	hydrochloride	91
6504	-----, 6-benzamido-	97
6127	3-Picoline, 2-acetamido-	84
6235	-----, 2-amino-	97
6507	-----, 2-benzamido-	98
6128	4-Picoline, 2-acetamido-	65
6237	-----, 2-amino-	100
7161*	Picolinic acid, hydrazide	98
	Picolinium compounds.	
3420	1-dodecyl-2------ p-toluenesulfonate	94
4251	1-methyl-2------ iodide	77
3419	1-dodecyl-3------ p-toluenesulfonate	80
3418	1-dodecyl-4------ p-toluenesulfonate	93
3920	2-Pipecoline	84
7266	-----, 1-(3,4-dimethoxybenzyl)-, hydrochloride	81
7262	-----, 1-(2-methoxy-5-methylbenzyl)-, hydrochloride	78
7269	-----, 1-(5-methyl-2-methylthiobenzyl)-, hydrochloride	63
6973	Piperazine, hydrate	18
6692	-----, 1-acetyl-4-dodecyl-	79
6791	-----, 1-(2-aminoethyl)-	24
6512	-----, 1,4-dibenzyl-, dihydrochloride	99
6792	-----, 2,5-diethyl-	95
6693	-----, 1,4-dilauroyl-	43
6789	-----, 2,6-dimethyl-	47

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
6790*	Piperazine, 2,5-dimethyl-1,4-dinitroso-	100
4402	-----, 1,4-dinitroso-	100
6793	-----, 1-ethyl-	71
6794*	-----, 1-phenyl-	100
6795*	-----, 2,3,5,6-tetramethyl-	97
5246	1,4-Piperazinedicarboxylic acid, 2,5-dimethyl-, diisopropyl ester	97
4250	2,5-Piperazinedione	65
	Piperazinium compounds.	
6554	1,4-didodecyl-1,4-diethyl----- bis(ethyl sulfate)	96
6634	1,4-diethyl-1,4-dihexadecyl----- bis(ethyl sulfate)	48
5619	2-Piperazinone, 4-(4,6-diamino-s-triazin-2-yl)-3,3-dimethyl-	94
5620	Piperazone, 4-[4,6-bis(chloroamino)-s-triazin-2-yl]-1-chloro-3,3-dimethyl-	92
4991	Piperidine, 1-(p-anisoyl)-	94
6281	-----, 1-benzoyl-	67
3266	-----, 1-benzoyl-3-[4-(N-methylbenzamido)butyl]-	89
6314	-----, 3-[(diphenylmethyl)amino]-1-methyl-, dihydrochloride	96
3362	-----, 1,1'-[dithiobis(1-methylethylene)]di-, dihydrochloride	93
6442	-----, salt with 1 f. wt. isodextropimaric acid	66
7222	1-Piperidinebutyronitrile, α,α-diphenyl-	85
3662	1-Piperidinecarbodithioic acid, 1-piperidinium salt	86
5076	1-Piperidinecarbonitrile	98
5243	1-Piperidinecarboxylic acid, 5-ethyl-2-methyl-, isopropyl ester	97
5240	-----, isopropyl ester	81
6381	1-Piperidineethanol, α-carvacryl-, hydrochloride	88
5991	1-Piperidinepropionitrile, α-phenyl-, hydrochloride	88
6707	1-Piperidinesulfonamide, N,N,2-trimethyl-	93
	Piperidinium compounds.	
3356	1-carboxymethyl-1-methyl----- chloride, tetradecyl ester	93
6302	1-ethyl-3-hydroxy-1-methyl----- bromide, benzilic acid ester	86
6305	3-Piperidinol, 1-ethyl-, hydrochloride	28
6304	diphenylacetate, hydrochloride	35
6311	ester with α-phenylcyclohexaneacetic acid, hydrochloride	95
6310	-----, 1-methyl-, diphenylacetate, hydrochloride	67

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Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
6667	2-Propanol, 1-(7-chloro-4-quinolylamino)-3-diethylamino-, diphosphate	97
7038	9-Propionic acid, 3,6-di-tert-butylcarbazole-	63
2854	Propionic acid, 3-indolyl-	71
6284	Propiophenone, 3-phenyl-3-piperidino-	81
	Pseudoindolium compounds.	
4744	2-[4-[(2-chloroethyl)ethylamino]-2-methylstyryl]-1,3,3-trimethyl-3H------ chloride	99
4742	2-[p-[(2-chloroethyl)methylamino]styryl]-1,3,3-trimethyl-3H------ chloride	87
4719	2-[2-(2,4-dimethoxyanilino)vinyl]-1,3,3-trimethyl-3H----- chloride	66
4740	1,3,3-trimethyl-2-[2-[[2-methylbenzothiazol-5(or 6)-yl]amino]vinyl]-3H------ chloride	90
4741	1,3,3-trimethyl-2-[2-(2-methyl-1-indolyl)vinyl]-3H----- chloride	90
4746*	1,3,3-trimethyl-2-[2-(1-methyl-2-phenyl-3-indolyl)-vinyl]-3H------ chloride	100
5995	Pseudourea, 2-(1,2,3,4-tetrahydro-2,4-dioxo-5-pyrimidinyl)-2-thio-, hydrochloride	44
5251	Purine, 2,6-bis(diethylamino)-	96
6643	Pyrazine, 2,3-bis(N4-acetylsulfanilamido)-5,6-dimethyl-	62
6788	-----, 2,3,5,6-tetramethyl-	62
4936	3-Pyrazolecarboxylic acid, 5-oxo-, ethyl ester	55
6064	3,5-Pyrazolidinedione, 4-butyl-1,2-diphenyl-, sodium derivative	79
4751*	2-Pyrazoline-3-carboxylic acid, 5-oxo-1-(o-sulfophenyl)-4-(o-sulfophenylazo)-, salt with 2 f. wt. dicyclohexylamine	100
3615	5-Pyrazolone, 3-amino-1-phenyl-	58
6084	5(4H)-Pyrazolone, 4-isonitroso-3-methyl-1-phenyl-	60
3791	-----, 3-methyl-1-phenyl-	65
4018	4-Pyridazineacetic acid, 1,2,3,4-tetrahydro-3,6-dioxo-2-phenyl-, ethyl ester	13
5325	3,6-Pyridazinediol, 4-methyl-	18
5841	3,6-Pyridazinedione, 4,5-dichloro-1,2-dihydro-	79
7294	-----, 1,2-dihydro-, 2,2'-iminodiethanol salt	22
3668	3(2H)-Pyridazinone, 4,5-dichloro-2-phenyl-	74
4931	3(2H)-Pyridazone, 4,5-dihydro-	96
6125	Pyridine, 2-acetamido-	96
6291	-----, 5-amino-2-sulfanilyl-	77
7114	-----, 5-(2-anilinoethyl)-2-methyl-	86
3097	-----, 2-bromo-	69

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Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
3098	Pyridine, 3-bromo-	54
3983	-----, 2-chloro-5-nitro-	76
7171	-----, 2-(p-chlorostyryl)-	92
7172	-----, 4-(p-chlorostyryl)-	92
7257	-----, compound with diborane	100
3358	-----, 2,6-diamino-	82
2739	-----, 2,6-distyryl-	6
5312, 5803	-----, 2-(furfurylamino)-	86, 99
3806	-----, 2-[2-(2-furyl)vinyl]-	97
6666	-----, 2-[2-(1-naphthyl)ethyl]-, hydrochloride	83
5874	-----, 3-(3-nitro-2-pyrazolin-5-yl)-	95
3421	-----, 2-(2-pyrrolin-2-yl)-	94
7135	3-Pyridineacetic acid, ethyl ester	83
5195	2-Pyridinecarbamic acid, 5-chloro-, isopropyl ester	55
4899	-----, 4,6-dimethyl-, isopropyl ester	92
5176	-----, 3-methyl-, isopropyl ester	89
5177	-----, 4-methyl-, isopropyl ester	70
5178	-----, 5-methyl-, isopropyl ester	73
5179	-----, 6-methyl-, isopropyl ester	81
5347	3,5-Pyridinedicarboxylic acid, 2,6-dimethyl-, diethyl ester	61
5284	2-Pyridineethanol, carbanilate	56
4664	m-nitrobenzoate	80
4468	-----, α-(trichloromethyl)-	97
4682	2-Pyridinethiol, 1-oxide, sodium derivative	100
	Pyridinium compounds.	
3613	1-(carboxymethyl)----- chloride, hydrazide	100
6317	1-(6-chloro-3-phenanthrylcarbonylmethyl)----- bromide	-36
3799	1-(2,4-dinitrophenyl)----- chloride	87
3417	1-dodecyl-2,4-dimethyl----- p-toluenesulfonate	97
3661	1-[2-(dodecylthio)ethyl]----- chloride	97
4122	1-methyl-2-(3-phenyl-1,3-butadienyl)----- methyl sulfate, polymer	58
3665	1-[2-(octylthio)ethyl]----- chloride	97
3979	1-pentyl----- benzenesulfonate	88
3889	2-Pyridinol	87
5911	3-Pyridinol, carbanilate	80
3937	2(1H)-Pyridone, 3-cyano-4,6-dimethyl-	70
3765, 7040	-----, 1-methyl-	-4, 99
6626	2H-Pyrido[1,2a]pyrimidin-3-ol, 3,4-dihydro-, monohydrochloride	72
3472	Pyrimidine, 2-amino-4-chloro-6-methyl-	64

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Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
3445	Pyrimidine, 2-amino-4,6-dimethyl-	69
4035	-----, 5-amino-5-methyl-1,3-bis(1-methylheptyl)hexahydro-	93
5739	-----, 1-(3-aminopropyl)-2-heptadecyl-1,x,x,x-tetrahydro-	71
4036	-----, 1,3-bis(1-methylheptyl)-hexahydro-5-methyl-5-nitro-	86
5738	-----, 2-heptadecyl-x,x,x,x-tetrahydro-4-methyl-	84
5737	-----, x,x,x,x-tetrahydro-2-undecyl-	67
5012	5-Pyrimidinecarboxylic acid, 1,2,3,4-tetrahydro-2,4-dioxo-, monohydrate	33
5036	-----, 1,2,3,4-tetrahydro-4-oxo-2-thioxo-, ethyl ester	88
6286	1(4H)-Pyrimidineethanol, 2-heptadecyl-5,6-dihydro-	78
6465	2-Pyrimidinethiol, 1,1'-(4,4'-biphenylene)bis[1,4-dihydro-4,4,6-trimethyl-	67
6407	-----, 1-(2-cyclohexylcyclohexyl)-1,4-dihydro-4,4,6-trimethyl-	84
6404	-----, 1-cyclohexyl-1,4-dihydro-4,4,6-trimethyl-	38
6246	-----, 1,4-dihydro-1,4,4,6-tetramethyl-	96
4047	-----, 1,4-dihydro-4,4,6-trimethyl-	93
6467	-----, 1,4-dihydro-4,4,6-trimethyl-1-phenyl-	78
6463	-----, 1,4-dihydro-4,4,6-trimethyl-1-o-tolyl-	30
6247	-----, 1,1'-p-phenylenebis[1,4-dihydro-4,4,6-trimethyl-	29
3657	2(1H)-Pyrimidinethione, 5,6-dihydro-4,6-dimethyl-6-thioureido-	85
6462	-----, 3,4-dihydro-4,4,6-trimethyl-1-(1-naphthyl)-	27
6464	-----, 1,1'-m-phenylenebis[3,4-dihydro-4,4,6-trimethyl-	3
3133, 7221	4-Pyrimidinol, 2,6-diamino-5-nitroso-	-9, -48
6036	2-Pyrimidinol, 4,6-dimethyl-, complex with 1 f. wt. 4,4'-dinitrocarbanilide	45
6700	Pyroglutamic acid, 3-pentyl-4-phenyl-	74
6345	Pyromellitic acid, diimide, N,N'-bis(m-chlorophenyl)-	-43
6344	-----, diimide, N,N'-bis(o-chlorophenyl)-	-102
6346	-----, diimide, N,N'-bis(p-chlorophenyl)-	-12
6350	-----, diimide, N,N'-bis(3-chloro-2-tolyl)-	-61
6357	-----, diimide, N,N'-bis(m-ethoxyphenyl)-	-7
6358, 6359	-----, diimide, N,N'-bis(p-ethoxyphenyl)-	39, -16
6355	-----, diimide, N,N'-bis(m-methoxyphenyl)-	-36
6354	-----, diimide, N,N'-bis(o-methoxyphenyl)-	-11
6356	-----, diimide, N,N'-bis(p-methoxyphenyl)-	-59
6348	-----, diimide, N,N'-bis(3-methylpyrid-2-yl)-	98
6349	-----, diimide, N,N'-bis(6-methylpyrid-2-yl)-	75
6333	-----, diimide, N,N'-diallyl-	39

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Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
6343	Pyromellitic acid, diimide, N,N'-dibenzyl-	-85
6334	-----, diimide, N,N'-dibutyl-	-1
6336	-----, diimide, N,N'-di-sec-butyl-	35
6337	-----, diimide, N,N'-di-tert-butyl-	25
6330	-----, diimide, N,N'-diethyl-	88
6351	-----, diimide, N,N'-di(2-ethylhexyl)-	-19
6341	-----, diimide, N,N'-diheptyl-	-17
6340	-----, diimide, N,N'-dihexyl-	-13
6335	-----, diimide, N,N'-diisobutyl-	-143
6332	-----, diimide, N,N'-diisopropyl-	37
6325	-----, diimide, N,N'-dimethyl-	63
6338	-----, diimide, N,N'-di(1-methylbutyl)-	0
6342	-----, diimide, N,N'-dioctyl-	-59
6339	-----, diimide, N,N'-dipentyl-	-18
6326	-----, diimide, N,N'-diphenyl-	8
6331	-----, diimide, N,N'-dipropyl-	22
6347	-----, diimide, N,N'-di(2-pyridyl)-	-52
6327	-----, diimide, N,N'-di-m-tolyl-	1
6328	-----, diimide, N,N'-di-o-tolyl-	-39
6329	-----, diimide, N,N'-di-p-tolyl-	10
3612	2-Pyrrolecarboxaldehyde	77
5346	3,5-Pyrroledicarboxylic acid, 2,4-dimethyl-, diethyl ester	76
6796*	Pyrrolidine, 2,5-dimethyl-	97
4065	-----, 1-dodecyl-	90
4258	-----, 1-octadecyl-	88
4896	1-Pyrrolidinecarboxylic acid, isopropyl ester	84
	Pyrrolidinium compounds.	
2748	1-benzyl-1-methyl-2-(3-pyridyl)----- thiocyanate	89
2744	1-butyl-1-methyl-2-(3-pyridyl)----- thiocyanate	92
2727	1-butyl-1-methyl-2-(3-pyridyl)----- p-toluenesulfonate	97
2747	1-(o-chlorobenzyl)-1-methyl-2-(3-pyridyl)----- thiocyanate	93
2745	1-(2,4-dichlorobenzyl)-1-methyl-2-(3-pyridyl)----- chloride	90
2746	1-(3,4-dichlorobenzyl)-1-methyl-2-(3-pyridyl)----- chloride	80
2740	1,1-dimethyl-2-(3-pyridyl)----- bromide	62
6548*	1-dodecyl-1-ethyl-2,5-dimethyl----- ethyl sulfate	93
2753	1-dodecyl-1-methyl-2-(3-pyridyl)----- chloride	84
2805	1-dodecyl-1-methyl-2-(3-pyridyl)----- oleate	88
2786	1-dodecyl-1-methyl-2-(3-pyridyl)----- p-toluene-sulfonate	83
6553	1-ethyl-2,5-dimethyl----- ethyl sulfate	100

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Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
	Pyrrolidinium compounds.	
2752	1,1'-ethylenebis[1-methyl-2-(3-pyridyl)----- bromide	94
6549	1-hexadecyl-1-methyl----- methyl sulfate	71
2731	1-hexadecyl-1-methyl-2-(3-pyridyl)----- bromide	94
2725	1-hexadecyl-1-methyl-2-(3-pyridyl)----- thiocyanate	100
2785	1-hexadecyl-1-methyl-2-(3-pyridyl)----- p-toluene-sulfonate	85
2749	1-methyl-1-octyl-2-(3-pyridyl)----- iodide	92
2750	1-methyl-1-octyl-2-(3-pyridyl)----- thiocyanate	85
3198	2-Pyrrolidone, 5-methyl-	18
5329	-----, 1-vinyl-	82
3778, 4853	Quinaldonitrile, 1-benzoyl-1,2-dihydro-	47, 64
4704, 5873	2,4(1H,3H)-Quinazolinedione	83, 84
7166	-----, 3-butyl-	92
6379	4(3H)-Quinazolinone, 3-[2-(diethylamino)ethyl]-, dihydrobromide	76
6067	Quinocrine, salt with 1 f. wt. sulfamic acid	82
7213	Quinoline, 5-acetamido-8-thioacetyl-	60
3995	-----, 8-amino-6-methoxy-, monohydrochloride	81
6280	-----, 8-[(3-aminopropyl)amino]-6-methoxy-, dihydrochloride	90
6387	-----, 8-[6-[(4-benzylpiperazin-1-yl)hexyl]amino]-6-methoxy-, dioxalate	93
2892	-----, 2-[2,2-bis[p-(dimethylamino)phenyl]ethyl]-	-34
6633	-----, 7-bromo-4-[[4-(diethylamino)-1-methylbutyl]amino]-, diphosphate	97
3721	-----, 5-bromo-6-methoxy-8-nitro-	-7
6283	-----, 8-[[6-(diallylamino)hexyl]amino]-6-methoxy-	96
4150	-----, 4,5-dichloro-	90
6312	-----, 8-[[6-(diethylamino)hexyl]amino]-2,6-dimethyl-, oxalate	100
6665	-----, 4-[(4-diethylamino-1-methylbutyl)amino]-6-(dimethylamino)-	82
2806	-----, 2-[p-(diethylamino)styryl]-	100
6041	-----, 2-(2-fluorenyliminomethyl)-	54
6285	-----, 8-[[5-(isopropylamino)pentyl]amino]-6-methoxy-3,4-dimethyl-, dihydrobromide	97
6653	-----, 6-methoxy-2-(p-methoxyphenethyl)-	66
6282	-----, 6-methoxy-8-[[5-[(1-methylbutyl)amino]-pentyl]amino]-, monohydrochloride	95
6651	-----, 2-(p-methoxyphenethyl)-	71
6652	-----, 4-(p-methoxyphenethyl)-	74
2760	-----, 8-phenylmercurioxy-	83

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Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
6628	Quinoline, 1,2,3,4-tetrahydro-6-methoxy-1-(10-piperidinodecyl)-	91
6627	-----, 1,2,3,4-tetrahydro-6-methoxy-1-(9-piperidinononyl)-	97
5996	3-Quinolinecarboxylic acid, 7-chloro-4-hydroxy-	59
3984	-----, 8-chloro-4-hydroxy-7-methyl-, ethyl ester	28
3251	2-Quinolineethanol	46
6319	4-Quinolinemethanol, 7-chloro-2-(p-chlorophenyl)-α-(diethylaminomethyl)-, hydrochloride	94
6318	-----, 8-chloro-2-(p-chlorophenyl)-α-2-piperidyl-	79
6320	-----, 3-(p-chlorophenyl)-α-(diethylaminomethyl)-6-methoxy-	75
6540	-----, α-(3-dibutylaminopropyl)-6-methoxy-, hydrochloride	93
3663	2-Quinolinethiol	89
	Quinolinium compounds.	
6069	4-chloro-2-[p-(dimethylamino)phenyliminomethyl]-6-methoxy-1-methyl----- chloride	89
3415	1-dodecyl----- p-toluenesulfonate	89
4149	4-Quinolinol, 5-chloro-	94
2886	8-Quinolinol	86
5535	carbanilate	65
2887, 3733	phosphate	75, 69
3633	salt with 1 f. wt. benzoic acid	63
3731	salt with 1 f. wt. maleic acid	63
3625	salt with 1 f. wt. salicylic acid	95
3474	sulfate	61
3051	-----, 5,7-dibromo-	15
6776	-----, 5,7-dichloro-, copper(II) derivative	34
3478	-----, 5,7-dinitro-	81
7275	Spiro[cyclopentane-1,5'-hexahydro-2',4',6'-pyrimidinetrione]	46
2803	Spiro[pseudoisoindole-1,9'-xanthen]-3(2H)-one, 3',6'-bis(diethylamino)-	-4
2738	2-Stilbazole	95
6256	-----, 2',4'-dichloro-	88
6639	Succinanilic acid, 4'-[p-(2,5-dimethyl-1-pyrrolyl)-phenylsulfonyl]-	53
5108	Succinimide, N-(2-acetoxyethyl)-	50
6762	-----, α-acetoxythio-N-carbamoyl-x-pentyl-	64
2946	-----, N-allyl-	71
4824	-----, α-anilino-N-phenyl-	-4
5683	-----, 2-benzyl-3,3-dimethyl-	79

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
7099	Succinimide, N-carbamoyl-	42
7087	-----, 2-chloro-3-(x-chlorophenyl)-N-phenyl-	58
3226	-----, 2-chloro-N-phenyl-	86
2955	-----, 2,N-dimethyl-	18
2943	-----, N-ethyl-	0
5682	-----, N-(2-ethylhexyl)-2-methyl-	76
2956	-----, N-ethyl-2-methyl-	52
3115	-----, N-hexyl-	48
4730	-----, N-(2-hydroxy-1,1-dimethylethyl)-, oleate	66
2966	-----, N-isobutyl-	14
2944	-----, N-isopropyl-	-3
2942	-----, N-methyl-	-68
2969, 5681	-----, 2-methyl-	49, 49
2958	-----, 2-methyl-N-phenyl-	27
2957	-----, 2-methyl-N-propyl-	23
2959	-----, 2-methyl-N-p-tolyl-	45
2945	-----, N-propyl-	35
5693, 5922	-----, 2,2,3,3-tetramethyl-	100, 100
3116	-----, N-p-tolyl-	11
5121, 5684	-----, N-vinyl-	88, 77
6705	Sulfamide, N'-antipyrinyl-N,N-dimethyl-	71
6668	Sulfanilamide, N^1-(5-bromo-2-pyrimidinyl)-	80
6479	-----, N^1-(6-methyl-3-pyridazinyl)-	25
6974	-----, N^1-2-pyridyl-	44
3676	Sulfide, bis(1-piperidylthiocarbonyl)	68
5033	1,3,6,8-Tetrazatricyclo[6.2.1.$1^{3,6}$]dodecane	90
5191	1H-Tetrazole, 5-amino-	61
5174	1H-Tetrazole-5-carbamic acid, ethyl ester	85
5552	d-Thioneine	12
6412	m-Toluenesulfonic acid, 6-(2-mercapto-4,4,6-trimethyl-1(4H)-pyrimidinyl)-	50
5701	s-Triazine, 4-[(2-acetamidoethyl)amino]-2,6-diamino-	43
5935	-----, 2-amino-4-benzenesulfonamido-6-phenyl-	15
5694	-----, 4-amino-6-benzenesulfonamido-2-phenyl-	40
4338	-----, 4,6-bis(methylamino)-2-methyl-	100
4737	-----, 2,4-bis(methylamino)-6-phenyl-	97
5609	-----, 2,4-bis[(1,1,3,3-tetramethylbutyl)amino]-6-chloro-	-2
5611	-----, 4-chloro-2,6-di(isopropylamino)-	93
5429	-----, 2,2'-(3-cyano-3-phenylpentamethylene)bis[4,6-diamino-	10
4328	-----, 2,4-diacetamido-6-phenyl-	29
4337*	-----, 2,4-diamino-6-benzyl-	89

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
5616	s-Triazine, 2,6-diamino-4-[1-(butoxy)ethoxy]methyl-	60
5702*, 5703	-----, 2,6-diamino-4-(tert-butylamino)-	90, 70
5614	-----, 2,4-diamino-6-chloro-	95
4925	-----, 4,6-diamino-2-chloro-	75
5606	-----, 2,6-diamino-4-[(1-cyanocyclohexyl)methylamino]-	59
5608	-----, 2,6-diamino-4-[[N-(cyanomethyl)-1,1,3,3-tetramethylbutyl]amino]-	21
5700	-----, 2,6-diamino-4-(o-cyanophenyl)-	87
5604	-----, 2,6-diamino-4-[(1-cyanopropyl)methylamino]-	-1
4736	-----, 2,4-diamino-6-(2-cyclohexenyl)-	90
5605	-----, 2,6-diamino-4-[(2,4-diamino-s-triazin-4-yl]-amino]-	32
5598	-----, 2,6-diamino-4-[2-[[4-(2,6-diamino-s-triazin-4-yl)butyl]amino]but-2-yl]-	96
5599	-----, 2,6-diamino-4-[2-[[4-(2,6-diamino-s-triazin-4-yl)butyl]amino]prop-2-yl]-	55
5597	-----, 2,6-diamino-4-[2-[[(2,6-diamino-s-triazin-4-yl)methyl]amino]but-2-yl]-	63
5600	-----, 2,6-diamino-4-[1-[[(2,6-diamino-s-triazin-4-yl)methyl]amino]propyl]-	33
5607	-----, 2,6-diamino-4-[2-[[(2,6-diamino-s-triazin-4-yl)methyl]amino]prop-2-yl]-	12
5596	-----, 2,6-diamino-4-[2-(dimethylamino)ethyl]-	34
5595	-----, 2,6-diamino-4-[(dimethylamino)methyl]-	33
5601*	-----, 2,6-diamino-4-[1-[1-(ethoxy)ethoxy]cyclohexyl]-	93
4721	-----, 2,4-diamino-6-(2-furyl)-	98
4735*	-----, 2,4-diamino-6-isopropyl-	97
5760	-----, 2,4-diamino-6-methyl-	73
4339	-----, 2,4-diamino-6-(methylthio)-	100
5767*	-----, 2,4-diamino-6-octadecyl-	93
5591*	-----, 2,6-diamino-4-phenethyl-	92
4336	-----, 2,4-diamino-6-phenyl-	83
4734	-----, 2,4-diamino-6-piperidino-	91
5761	-----, 2,4-diamino-6-(3-sulfopropyl)-, sodium salt	45
5612	-----, 2,6-di(tert-butylamino)-4-chloro-	99
4794	-----, 2,4-dichloro-6-(o-chloroanilino)-	80
5613	-----, 2,6-dichloro-4-(cyclohexylamino)-	76
4490	-----, 2,2'-[oxybis(ethylenethio)]bis[4,6-diamino-	25
4739	-----, 2,2'-o-phenylenebis[4,6-diamino-	84
6456	-----, 1,3,5-tricyclohexylhexahydro-	93
6459	-----, 1,3,5-tridodecylhexahydro-	73
5603	-----, 2,4,6-tri(isopropylamino)-	100
6770	-----, 1,3,5-tris[x-(dimethylamino)propyl]hexahydro-	1

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen	
5610	s-Triazine, 2,4,6-tris[(1,1,3,3-tetramethyl)butylamino]-	33
6406*	-----, 1,3,5-tris(3,5,5-trimethylhexyl)hexahydro-	95
5699	2-s-Triazineacetamide, 4,6-diamino-	42
6086	1,2,4-Triazole, 3-amino-	26
5817	4H-1,2,4-Triazole, 4-amino-	43
5122*	-----, 3-amino-, picrate	100
5884	-----, 4-amino-3,5-diethyl-	55
5340	-----, 4-amino-3,5-dimethyl-	41
5883	monohydrochloride	50
7106	-----, 4-amino-3-hydrazino-5-mercapto-	96
2911	Uracil, 6-amino-	28
2912	-----, 5,6-diamino-, salt with ½ f. wt. sulfuric acid	27
6995	p-Urazine	20
5947	Urea, 1-(3,5-diethyl-4H-1,2,4-triazol-4-yl)-3-p-tolyl-	56
5945	-----, 1-(3,5-dimethyl-4H-1,2,4-triazol-4-yl)-3-phenyl-	51
6403	-----, 1,3-di(2-pyridyl)-2-thio-	96
5172	-----, 1H-tetrazol-5-yl-	32
7267	2,4 Xylenol, α^2-(2-pipecolino)-, hydrochloride	91
	Nitrogen and Oxygen	
4547	Benzaldehyde, o-ethoxy-, 2-benzoxazolylhydrazone	23
4563	-----, p-ethylsulfonyl-, 2-benzoxazolylhydrazone	-7
3013	Benzenearsonic acid, p-morpholinylsulfonyl-	81
5175	Benzofurazan, 5-methyl-4-nitro-, N^3-oxide	100
4313	-----, N-oxide	100
3771	1,3-Benzoxazine, 1-acetyl-4-oxo-2-phenyl-	66
3774	-----, 1-acetyl-2-trichloromethyl-4-oxo-	-50
4943	Benzoxazole, 2-phenyl-	94
3648	2-Benzoxazolethiol	73
6691	2-Benzoxazolinone	56
5877	-----, 5,6-dinitro-	88
4427	o-Cresol, 4-chloro-α-morpholino-	60
4399	-----, α-morpholino-	73
5415	1,4-Cyclohexanedione, 2,5-dimorpholino-	45
6303	d-Fructose, 1-deoxy-1-morpholino-	-4
6787	Isatoic anhydride	36
4891	2-Isoxazolin-5-one, 4-benzylidene-3-methyl-	51
4408	-----, 4-cinnamylidene-3-methyl-	48
2717	Morpholine, salt with 1 f. wt. fluosilicic acid	84
3012	-----, 4-(p-arsenosophenylsulfonyl)-	60
4805	-----, 4-butyryl-	83
3964	-----, 4-(p-chlorophenylsulfonyl)-	29

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen and Oxygen	
3963	Morpholine, 4-(3,4-dichlorophenylsulfonyl)-	74
4257	-----, 2,6-dimethyl-4-octadecyl-	96
4063	-----, 4-dodecyl-	82
4064	-----, 4-dodecyl-2,6-dimethyl-	86
5028	-----, 4-(9-fluorenyl)-	72
3175	-----, 4-hexadecyl-	73
6561	salt with 1 f. wt. monobutyl phosphate	83
6562	salt with 1 f. wt. monododecyl phosphate	44
4807	-----, 4-hexanoyl-	88
3723	-----, 4-(2-naphthylthioacetyl)-	78
4397	-----, 4-(m-nitrobenzoyl)-	96
4256	-----, 4-octadecyl-	90
3714	-----, 4-(phenylacetyl)-	55
6704	-----, 4,4'-sulfonyldi-	68
3725	-----, 4-[(5,6,7,8-tetrahydro-2-naphthyl)thioacetyl]-	32
5413	-----, 4,4'-tetramethylenedi-	88
3956	4-Morpholinecarbodithioic acid, copper(II) salt	-118
3957	mercury(II) salt	92
3958	sodium salt	91
3967	diester with 2,2'-oxydiethanethiol	63
3962	2-hydroxyethyl ester	49
5020	4-Morpholinecarboxylic acid, isopropyl ester	89
3948	4-Morpholineethanol	49
5014	carbanilate	86
6671	-----, α-(p-bromophenyl)-3-ethyl-, hydrochloride	92
5411	4-Morpholinepropionitrile	86
3819, 4854	4-Morpholinesuccinonitrile	71, 86
6708	4-Morpholinesulfonamide, N,N-dimethyl-	66
	Morpholinium compounds.	
6546	4-benzyl-4-[(2,5,8,11,14,17,20-heptamethyl-3,6,9,12,-15,18,21-heptoxo-23-hydroxy)tetracosyl]----- chloride	74
3949	4,4-bis(2-hydroxyethyl)----- chloride	-5
6544	4-(2-carboxyethyl)-4-x-octadecenyl----- betaine	5
6542	4-(2,3-epoxypropyl)-4-hexadecyl----- chloride	72
6568	4-ethyl-4-hexadecyl----- 1-dodecanesulfonate	76
6567*	4-ethyl-4-hexadecyl----- methanesulfonate	93
6565*	4-ethyl-4-hexadecyl----- p-toluenesulfonate	94
3981	4-methyl-4-pentyl----- benzenesulfonate	16
3950	4,4'-oxydiethylenebis[4-(2-hydroxyethyl)----- chloride	-77
3969	Morpholinocarbodithioic acid, ester with 2-(pentachlorophenoxy)ethyl mercaptoacetate	78
5418	Morpholinosuccinic acid, dibutyl ester	44
4114	3-Morpholone	14

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen and Oxygen	
4479	1,3,5,4H-Oxadiazin-4-one, 3,5-bis(butoxymethyl)tetrahydro-	75
6767	2H-1,2-Oxazine, 3,6-dihydro-4(or 5)-methyl-2-nitroso-	97
6768*	-----, 3,6-dihydro-2-phenyl-	99
4042	Oxazolidine, 4,4-dimethyl-2-phenyl-	-6
3411	2,4-Oxazolidinedione, 5,5-dimethyl-	61
6812	3-Oxazolidineethanol, 2-nonyl-	78
5814	2-Oxazolidinethione, 4-ethyl-	88
6809	2-Oxazolidinone, 5-methyl-	58
6810	-----, 5-phenyl-	48
4726	2-Oxazoline, 2-(8,10-heptadecadienyl)-5-methyl-	61
4727	-----, 2-(8,11-heptadecadienyl)-5-methyl-	65
4725	-----, 2-(8-heptadecenyl)-	42
4728	-----, 2-(8-heptadecenyl)-5-methyl-	51
4729	-----, 2-heptadecyl-5-methyl-	77
4723	-----, 5-methyl-2-undecyl-	65
6399	-----, 5-(2,4,4-trimethylpentyl)-2-undecyl-	45
6483	1-Penten-3-one, 1-(2-furyl)-5-morpholino-, hydrochloride	79
5259	Phthalimide, N-(morpholinomethyl)-	69
6482	1-Propanone, 1-(2,5-diphenyl-3-furyl)-3-morpholino-	85
6476	Propiophenone, 2-(benzylmethylamino)-3-morpholino-3-phenyl-	58
6481	-----, 2,3-dimorpholino-3-(m-nitrophenyl)-	14
6240	Sulfanilamide, N1-(3,4-dimethyl-5-isoxazolyl)-	14
6975	Tin, dichlorodi(4-morpholinobutyl)-	(T)
5421	Tricarballylic acid, β-morpholino-, triallyl ester	98
5417	triethyl ester	32
3653	Trisulfide, bis(morpholinothiocarbonyl)-	34
	Nitrogen and Sulfur	
3454	Acetanilide, N-2-benzothiazolyl-	35
3644	-----, 4'-sulfamoylthiazol-2-yl-	-35
3047	Acetic acid, [(2-benzothiazolyl)thio]-	90
5258	-----, (2-imino-4-oxo-5-thiazolidinyl)-	-5
3639	-----, (5-pseudothiohydantoinyl)-	-45
3850	cyclohexylamine salt	78
3849	dicyclohexylamine salt	83
3467	2-ethylhexyl ester	25
3848	hexadecylamine salt	58
3468	sodium salt	5
3976	p-Anisaldehyde, (2-benzothiazolyl)hydrazone	71

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen and Sulfur	
3977	Benzaldehyde, p-acetamido-, (2-benzothiazolyl)hydrazone	-15
3975	-----, p-hydroxy-, (6-nitro-2-benzothiazolyl)hydrazone	-52
5889	1,2-Benzisothiazolin-3-one, 2-methyl-, 1,1-dioxide	42
5546	2,1,3-Benzothiadiazole	87
5556	2H-1,4-Benzothiazine-2,2-diacetic acid, 3,4-dihydro-3-oxo-	29
3649	Benzothiazole	73
5123, 5396	-----, 2-amino-5,6-dimethoxy-	100, 97
6233	-----, 6-amino-2-mercapto-	92
5045	-----, 2-[(3-butenyl)thio]-	87
6384	-----, 2-butoxy-6-nitro-	89
3690, 5458	-----, 5-chloro-2-mercapto-	75, 89
3892, 7066	-----, 2-hydrazino-	(T)
3366	-----, 2-(p-methoxyanilino)-	10
3590	-----, 2-phenylmercurithio-	75
7115	-----, 2-thiocyanato-	80
3118, 3506		51, 89
7292*	2-Benzothiazolesulfenamide, N-cyclohexyl-	52
3479	2-Benzothiazolesulfonic acid, calcium salt	55
3021	2-Benzothiazolethiol, compound with cyclohexylamine	79
3326	copper(II) derivative	45
3921, 7286	zinc derivative	-35, 0
3033	-----, 4-phenyl-	-34
	Benzothiazolium compounds.	
5395	2,3-dimethyl----- methyl sulfate	92
3220	Disulfide, N,N'-ethylenebis[N-cyclohexylthiocarbamoyl]	49
6287	1,3,5-Dithiazine, dihydro-2,4,6-trimethyl-, hydrochloride	80
3641	Ethanol, 2-[(2-benzothiazolyl)thio]-	97
5250	Hydantoin, 5,5-dimethyl-2,4-dithio-	99
3654	Melamine, N^2,N^4,N^6-tris(2-benzothiazolylthiomethyl)-	3
2991, 4188	Phenothiazine	93, 68
2710	-----, 10-benzoyl-3,7-bis(dimethylamino)-	-6
6313	-----, 10-(1-ethyl-3-piperidyl)-, hydrochloride	98
2858	-----, 5-oxide	-11
4471	Rhodanine, 5-(3,4-dichlorobenzylidene)-	86
5457	-----, 3,3'-hexamethylenebis-	15
5555	-----, 5-vanillylidene-	67
6709	Sulfanilamide, N^1-(5,5-dimethyl-2-thiazolin-2-yl)-	35
6386	-----, N^4-methylene-N^1-2-thiazolyl-, sodium derivative	12
3923, 7069	-----, N^1-2-thiazolyl-	20, 88
4554	4H-1,3,4-Thiadiazine-2-thiol, 5-phenyl-	99
4073*	2H-1,3,5-Thiadiazine-2-thione, tetrahydro-3,5-dimethyl-	94

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Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Nitrogen and Sulfur	
6473	1,2,4-Thiadiazole, 3,5-bis(ethylmercurithio)-	65
5139	1,3,4-Thiadiazole, 2,5-bis(diethyldithiocarbamoyl)-	45
3647	-----, 2,5-dithiol-	42
6460	1,2,5-Thiadiazolidine, 2,5-bis(3,5,5-trimethylhexyl)-, 1,1-dioxide	20
	Thiamorpholinium compounds.	
6550, 6551	4-hexadecyl-4-methyl----- methyl sulfate	83, 96
4052	6H-1,3-Thiazine-2-thiol, 4,6,6-trimethyl-, copper(I) derivative	19
6510*	sodium derivative	96
6511	zinc derivative	97
3974	Thiazole, 2-acetamido-4,5-bis(acetoxymercuri)-	95
5127*	-----, 2-acetamido-4-methyl-	96
5119	-----, 2-acetamido-5-methyl-	96
5132	-----, 2-acetamido-4-methyl-5-nitro-	96
5004	-----, 2-(2,2,2-trichloroacetamido)-	64
4137	2-Thiazolecarbamic acid, 4,5-bis(chloromercuri)-, benzyl ester	68
4136	-----, ethyl ester	81
3707	4-Thiazolecarboxylic acid, 2-amino-, ethyl ester	55
3119	2-Thiazoleethylsulfenamide, N,N-dipentyl-	88
5812	2-Thiazolidinethione, 4,4-dimethyl-	98
5549	-----, 3-(2-ethylbutyl)-	96
5456	-----, 3-(ethylcarbamoyl)-	95
5548	-----, 3-isopropyl-	100
5547	-----, 5-methyl-	99
7121	4-Thiazolidinone, 5-ethyl-2-imino-	73
3038	-----, 2-imino-	76
3039	-----, 3-phenyl-2-phenylimino-	-13
5345	4-Thiazolidone, 3-butyl-2-butylimino-	99
4558	2-Thiazolol, 4-methyl-	86
3645	4'-(2-Thiazolylsulfamoyl)phthalanilic acid	24
5112*	Urea, 1-phenyl-3-(2-thiazolyl)-	99
	Oxygen	
3503	Acetamide, N-cyclohexyl-N-tetrahydrofurfur-2-yl-	77
4102	Acetic acid, (2-hydroxyethoxy)-, lactone	-15
3470	-----, phthalidylidene-, ethyl ester	-4
4862	Acetoacetic acid, 2-(2-hydroxyethyl)-, γ-lactone	47
6834, 7035	Acetone, furfurylidene-	97, 99
5854	-----, piperonylidene-	50
5316	Acrylic acid, β-2-furyl-	51

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Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Oxygen	
6363, 7028	Acrylophenone, 3-(2-furyl)-	69, 96
6701	Allophanic acid, 5-nitrofurfurylidenehydrazide	49
2833	1-Apocamphaneacetic acid, 2-hydroxy-, lactone	75
4178	Benzamide, N-homopiperonyl-3,4,5-trimethoxy-	45
5857	-----, 3,4-methylenedioxy-N,N-dipentyl-	94
5856	-----, 3,4-methylenedioxy-N,N-dipropyl-	97
4343*	Benzene, p-bis(2,3-epoxypropoxy)-	91
4344*	-----, 2-tert-butyl-1,4-bis(2,3-epoxypropoxy)-	95
4345	-----, 1,4-di-tert-butyl-2,5-bis(2,3-epoxypropoxy)-	60
6362	-----, (2,3-epoxypropyl)-	80
4372	1,3-Benzodioxan, 2,4-bis(trichloromethyl)-6-nitro-	63
3767	-----, 8-methoxy-2-methyl-4-oxo-	39
3321	-----, 6-nitro-	57
3820	1,3-Benzodioxan-4-one	86
3770	-----, 6-bromo-2-methyl-	87
3826	-----, 6-chloro-2,8-dimethyl-	88
3752	-----, 6-chloro-2-methyl-	78
3228	-----, 2-(o-chlorophenyl)-	54
3823	-----, 2-(2,6-dichlorophenyl)-	32
3753	-----, 2,8-dimethyl-	85
3736	-----, 2-methyl-	82
3824	-----, 2-(3,4-methylenedioxyphenyl)-	24
3825	-----, 8-methyl-2-(3,4-methylenedioxyphenyl)-	52
3232	-----, 2-(m-nitrophenyl)-	81
3227	-----, 2-phenyl-	84
3822	-----, 2-styryl-	-11
7217	Benzofuran, 3-nitro-	27
3413	Benzoic acid, 2-hydroxymercuri-3-nitro-, γ-lactone	98
4763, 4951	-----, p-nitro-, piperonylidenehydrazide	74, 0
4963	-----, piperonylidenehydrazide	89
6477	2H-1-Benzopyran-3-carboxylic acid, 8-allyl-2-oxo-, 2-(dibenzylamino)ethyl ester, hydrochloride	58
5941	Bicyclo[2.2.1]hept-5-ene-2-acetic acid, 2-carboxy-1,4,5,6,7,7-hexachloro-, cyclic anhydride	46
6815	2-Biphenylcarboxylic acid, 5'-chloro-2'-hydroxy-, δ-lactone	95
5007, 5564*	-----, 2'-hydroxy-, δ-lactone	100, 97
6819	-----, 2'-hydroxy-5'(?)-nitro-, δ-lactone	78
3636	3,3'-Biphthalide	-32
4182	Bis(homopiperonyl)amine, hydrochloride	96
4081	1-Butene, 1-(2-furyl)-2-nitro-	100
4083	-----, 1-(3,4-methylenedioxyphenyl)-2-nitro-	70
5802	3-Buten-2-one, 4-(5-nitro-2-furyl)-	94

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Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Oxygen	
2906	Butyric acid, 4-benzoyl-4-hydroxy-2,3-diphenyl-, γ-lactone	-27
5920	-----, 2,4-dihydroxy-3,3-dimethyl-, γ-lactone	36
3397	d-Camphoric anhydride	42
4929	Caproic acid, β-hydroxy-, β-lactone	13
4873	Carbamic acid, furfuryl-, isopropyl ester	85
5795	Carbazic acid, 2-(2-hydroxyethyl)-, γ-lactone, hydrochloride	97
5798	-----, 2-(2-hydroxypropyl)-, γ-lactone, hydrochloride	95
6805*	Carbonic acid, cyclic chloromethylethylene ester	97
6807	cyclic 1,2-dichloroethylene ester	77
3569	cyclic ethylene ester	-8
6799	cyclic methylvinylene ester	14
4863	d-Catechol	31
3406	α-Cellobiose, octaacetate	-10
2734	Chalcone, 3,4-methylenedioxy-	35
4417	Cinnamic acid, α-(β-hydroxy-p-methylstyryl)-, γ-lactone	44
2789	α-Conidendrin, diacetate	41
2794	di-p-toluenesulfonate	22
2790	β-Conidendrin, diacetate	20
2795	di-p-toluenesulfonate	15
2791	α-Conidendrol, tetraacetate	64
2793	tetrabenzoate	10
2792	β-Conidendrol, tetraacetate	30
3775	Coumalic acid, methyl ester	97
3136	Coumarilic acid	77
3603	Coumarin, 3-acetyl-4-hydroxy-	99
5270	-----, 5,7-dihydroxy-4-methyl-	45
3435	-----, 6-methoxy-4-methyl-	-5
7159	-----, 4-methyl-	91
7129	-----, 3,3'-thiobis[4-hydroxy-	64
3675	Crotonic acid, α-anilino-β-chloro-γ-hydroxy-γ-methoxy-, γ-lactone	34
3634	-----, 2-cyano-4-hydroxy-2,4-diphenyl-, γ-lactone	-78
3622	-----, 2,3-dichloro-4-hydroxy-4-phenyl-, γ-lactone	24
6830	-----, 2-furyl-	67
5339	Cyclohexane-1,2-dicarboxylic anhydride, 4,5-dichloro-3,6-endoxy-	48
4710, 6006	4-Cyclohexene-1,2-dicarboxylic anhydride	57, 31
3911	2-Cyclohexene-1,2-dicarboxylic anhydride, 5-acetyl-3-carboxymethyl-4,6,6-trihydroxy-6-methyl-, γ-lactone	44
6817	6H-Dibenzopyran, 6,6-dimethyl-	85

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Oxygen	
5385	m-Dioxane, 2-(p-chlorophenyl)-4-methyl-	90
5377	-----, 2-ethyl-2,4-dimethyl-	-17
5380	-----, 2-ethyl-2,5-dimethyl-5-nitro-	94
5211	-----, 5-ethyl-2-nonyl-4-propyl-	71
5367	-----, 2-(2-furyl)-	80
5375	-----, 2-(2-furyl)-4,6-dimethyl-	84
5374	-----, 2-(2-furyl)-5,5-dimethyl-	93
5376	-----, 2-(2-furyl)-4-methyl-	56
5921	-----, 2-isopropyl-5,5-dimethyl-	35
5369	-----, 2-styryl-	40
5212	-----, 4,4,6-trimethyl-2-nonyl-	84
6485	1,3-Dioxepin, 2-sec-butyl-4,7-dihydro-	15
6488	-----, 4,7-dihydro-2-isopropyl-	15
6489	-----, 4,7-dihydro-7-propenyl-	20
5382	1,3-Dioxolane, 2-(o-chlorophenyl)-4,5-dimethyl-	74
5372	-----, 2-(o-chlorophenyl)-4-methyl-	74
5371	-----, 2-(p-chlorophenyl)-4-methyl-	65
5368	-----, 2-ethyl-2,4-dimethyl-	11
5379	-----, 2-(2-furyl)-4,5-dimethyl-	66
5378	-----, 2-(2-furyl)-4-methyl-	42
5305	Ether, ethyl furfuryl	60
5309	-----, furfuryl methyl	31
5320	-----, methyl 5-nitrofurfuryl	84
4979	-----, tetrahydrofurfuryl 2,4-dinitrophenyl	98
4866	Flavanone, d-3,3,4,5,7-pentahydroxy-	28
4134	2-Furaldehyde, azine	97
7032	oxime	90
5786, 7193	semicarbazone	88, 99
5313, 5788	-----, 5-nitro-	96, 95
5799	anti-oxime	89
2796	semicarbazone	37
2799	semioxamazone	85
4974, 6835		85, 60
7062	2-Furamide	85
2798	-----, 5-nitro-	95
4082*	Furan, 2-(2-bromo-2-nitrovinyl)-	100
3437	-----, 2-chloromercuri-	94
4968	-----, 2-chloro-5-nitro-	94
7151	-----, 5-chloro-2-(2-nitrovinyl)-	100
5778	-----, 2,5-diethyltetrahydro-2,5-dimethyl-	39
4420	-----, 2-(2,4-dinitrophenoxymethyl)tetrahydro-	100
2736	-----, 2-methoxymethyl-5-nitro-	95
5317, 5791	-----, 2-nitro-	83, 73

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Oxygen	
3440, 3789		96, 100
4041*	Furan, 2-(2-nitrovinyl)-	100
5107	-----, tetrahydro-2,2,4,4-tetramethyl-	42
2728	-----, 2-[2-(2,4,6-trinitrophenyl)vinyl]-	30
3729	-----, 2-(2,4,6-trinitrostyryl)-	77
3805	2-Furanacrylamide, α-cyano-	71
3628, 5775	2-Furanacrylic acid	-30, 52
5779	-----, cis/trans-α-acetyl-, ethyl ester	94
3804	-----, α-cyano-, ethyl ester	62
3259	2-Furanilide	87
5319, 5774	2-Furanmethanediol, diacetate	81, 60
5307, 5781	dibutyrate	68, 66
5780	dipropionate	59
4007, 5787	-----, 5-nitro-, diacetate	57, 72
5804	dipropionate	86
3623	2(5H)-Furanone, 3,4-dichloro-5-dodecyloxy-	82
3631	-----, 3,4-dichloro-5-hydroxy-, carbanilate	44
3790	-----, 3,4-dichloro-5-phenacyl-	91
3632	-----, 5,5'-oxybis[3,4-dichloro-	65
5496	3(2H)-Furanone, dihydro-2,2,5,5-tetramethyl-	-14
5801	DL-2-Furanserine	48
5306	Furfuryl alcohol, acetate	59
5308	butyrate	66
3673, 5181	carbanilate	59, 92
4006, 5790	-----, 5-nitro-, acetate	85, 86
5301	bromoacetate	89
2754	chloroacetate	70
5300	p-chlorobenzoate	30
5302	x-chloropropionate	78
4662	-----, tetrahydro-, p-nitrobenzoate	89
5311, 5789	2-Furfuryl alcohol, 5-nitro-	92, 94
6831	Furfurylamine	94
6832	-----, tetrahydro-	74
3629	Furil	(T)
4973*	2-Furoic acid, allyl ester	98
4844	butyl ester	60
6521*	2-chloroethyl ester	95
4972	decyl ester	63
6822	docosyl ester	17
4860, 5215	ethyl ester	48, 38
6820	hexadecyl ester	58
4969	hexyl ester	69
4970	isopentyl ester	67
4964	isopropyl ester	61

TABLE I

Code No.	Classification and Name	
	HETEROCYCLIC COMPOUNDS	
	Oxygen	
4843	2-Furoic acid, methyl ester	79
6821	octadecyl ester	34
4971	octyl ester	64
4848	propyl ester	47
4965, 5782	-----, 5-bromo-	83, 93
4966, 5783	-----, 5-chloro-	90, 95
7167	-----, 3,4-dichloro-	86
7168	ethyl ester	78
5784	-----, 5-nitro-	84
4967	ethyl ester	100
5792, 6828	methyl ester	92, 97
5785, 6829	propyl ester	94, 99
4846	-----, 2,3,4,5-tetrachlorotetrahydro-, butyl ester	100
6827	2-chloroethyl ester	100
6826	docosyl ester	10
6823	dodecyl ester	99
4859	ethyl ester	97
6824	hexadecyl ester	95
4845	methyl ester	100
6825	octadecyl ester	97
5162, 5386	octyl ester	100, 100
4847	propyl ester	100
5815	2-Furoyl chloride, 5-nitro-	86
2721	α-D-Glucoside, 1-allyl-	32
3972	D-Glucoside, 1-[bis(2-hydroxyethyl)amino]-	-27
3337	Glutaric anhydride, β,β-dimethyl-	25
3378	Hemipic anhydride	-52
5169	Heptanedioic acid, 3-(1-hydroxy-1-methylethyl)-, γ-lactone	55
5161	Heptanoic acid, 3-(1-hydroxy-1-methylethyl)-6-oxo-, γ-lactone	60
5855	2-Heptanone, 1-piperonylidene-	56
3993	Hexanoic acid, 5-hydroxy-4,4-dimethyl-6-nitro-, δ-lactone	81
4161	Homopiperonylic acid	41
4163	Hydrocinnamic acid, 3,4-methylenedioxy-	11
5652	2-Imidazoline, 2-[(6-chloro-1,3-benzodioxan-8-yl)-methylthiol]-	76
5651	hydrochloride	89
3874	-----, 2,4,5-tri(2-furyl)-	98
4162	5H-Inden[5,6-d]-1,3-dioxol-5-one, 6,7-dihydro-	78
3247	1,3-Isochromandione	24
5314, 5776	Ketone, 2-furyl methyl	45, 81

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Oxygen	
5318	Ketone, 2-furyl phenyl	99
2797	-----, methyl 5-nitro-2-furyl	100
6696	semicarbazone	97
5777	Malonic acid, furfurylidene-	53
3046, 7185	Malononitrile, furfurylidene-	98, 100
3711	Maltol	28
6440	2,5-Methano-2H-oxireno[a]indene, 4,4'-[oxybis(ethyleneoxy)]bis[octahydro-	59
3821	4H-Naphtho[2,3-d]-m-dioxin-4-one, 2-methyl-	71
2787	2-Naphthoic acid, 4-(3,4-dimethoxyphenyl)-1,2,3,4-tetrahydro-3-(hydroxymethyl)-6,7-dimethoxy-, γ-lactone (from α-conidendrin)	38
2788	γ-lactone (from β-conidendrin)	40
5389	Naringenin	34
6279	Octadecanoic acid, 9,10,12,13-diepoxy-	-17
6278	methyl ester	18
5404	-----, 10,11-epoxy-9,12-dioxo-	22
5408	-----, 10,11-epoxy-12-oxo-	74
5880	7-Oxabicyclo[2.2.1]heptane-2-carboxylic acid, 3-(1-naphthylcarbamoyl)-	83
5944	-----, 3-(4H-1,2,4-triazol-3-ylcarbamoyl)-	58
5846	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboximide, N-ethyl-	54
5879	-----, N-1-naphthyl-	32
6008	7-Oxabicyclo[4.1.0]heptane-2-decanoic acid, 5-butyl-3(and 4)-carboxy-θ,ι-epoxy-, diethyl ester	29
6009	and 7-oxabicyclo[4.1.0]heptane-2-octanoic acid, 3(and 4)-carboxy-5-(1,2-epoxyhexyl)-, diethyl ester	34
5397	7-Oxabicyclo[4.1.0]heptane, d-4-isopropyl-1-methyl-	42
3433	7-Oxabicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic anhydride	90
5164	6-Oxabicyclo[3.2.1]oct-3-ene, d,l-4,7,7-trimethyl-	56
5165	3-Oxatricyclo[4.1.1.$0^{2,4}$]octane, d-2,7,7-trimethyl-	47
3989	Oxepane, dodecafluoro-	-47
3991	Oxonane, hexadecafluoro-	-119
3986	2-Pentenoic acid, 4-hydroxy-, γ-lactone, dimer	79
3745, 4013		60, 74
5304	Phthalic anhydride, tetrachloro-	84
3602	Phthalide	62
3254	-----, 3-benzylidene-	11
2801	-----, 3,3-bis[p-(dimethylamino)phenyl]-	-239
2802	-----, 3,3-bis[p-(dimethylamino)phenyl]-6-(dimethylamino)-	-1
5275	-----, 3,3-bis(2,4,6-trihydroxy-m-tolyl)-	51

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Oxygen	
3783	Phthalide, 3-ethylidene-	49
3382	-----, 3-phenyl-	45
3915	-----, 3-propylidene-	86
4166	Piperonal, diethyl acetal	43
4466	oxime	89
5383	Piperonyl alcohol, α-benzyl-, formate	100
6208	-----, α-tert-butyl-, pivalate	78
5202	-----, p-chlorobenzoate	-47
4009	Piperonyloin	-14
3079	Propane, 1-(2-biphenylyloxy)-2,3-epoxy-	64
4323	-----, 3-(2,4,5-trichlorophenoxy)-1,2-epoxy-	82
5315	1-Propanone, 1-(2-furyl)-	74
5310, 5800	-----, 1-(5-nitro-2-furyl)-	100, 98
3082	Propiophenone, 2,3-dibromo-4'-chloro-3-(3,4-methylenedioxyphenyl)-	6
4801	2H-Pyran, 3,4-dihydro-2-isobutyoxy-4-methyl-	20
4176	Pyran, 3-bromo-2-ethoxytetrahydro-	66
4174	-----, 3-bromotetrahydro-2-methoxy-	58
4175	-----, 3,4-dibromo-2-ethoxytetrahydro-	100
4167	Pyran-2-malonic acid, tetrahydro-, diethyl ester	35
5538	Pyran-2-methanol, tetrahydro-, carbanilate	75
6368	4H-Pyran-4-one, 2-benzoyl-3-hydroxy-6-(hydroxymethyl)-	13
5312, 5803	Pyridine, 2-(furfurylamino)-	86, 99
3806	-----, 2-[2-(furyl)vinyl]-	97
4011	Santonin	82
2803	Spiro[pseudoisoindole-1,9'-xanthen]-3(2H)-one, 3',6'-bis(diethylamino)-	-4
4364	Stilbene, 3,4-methylenedioxy-2',4'-dinitro-	18
3610	Styrene, 3,4-methylenedioxy-β-nitro-	33
4252	-----, 2,4,6-trinitro-3-(5-nitro-2-furyl)-	91
6982	Succinic anhydride, x-dodecenyl-	64
6771	-----, p-methoxybenzyl-	-36
3246	Tartaric anhydride, diacetate	11
6797	diacetyl	37
3234	2,4,8,10-Tetraoxaspiro[5.5]undecane, 3,9-bis(trichloromethyl)-	9
4380	1,3,5,7-Tetroxocane, 2,6-bis(trichloromethyl)-	46
6391	o-Toluic acid, α-hydroxy-x-sulfo-, γ-lactone copper(II) salt	60
4721	s-Triazine, 2,4-diamino-6-(2-furyl)-	98
5273	Umbelliferone, 3-benzyl-4-methyl-	70
3324, 7029	-----, 4-methyl-	42, 57
3940	Valeric acid, 5-hydroxy-4,4-dinitro-, δ-lactone	44
7190	Xanthone	95

TABLE I

Code No.	Classification and Name	K Value
	HETEROCYCLIC COMPOUNDS	
	Oxygen and Sulfur	
7088	5H-1,4-Benzoxathiepin, 2,3-dihydro-7-methyl-	57
7108	2H,6H-1,5-Benzoxathiocin, 3,8-dichloro-3,4-dihydro-	83
2842, 4217	Phenoxathiin	99, 98
2849, 4202	-----, 10-oxide	96, 99
3616	-----, 10,10-dioxide	80
	Sulfur	
3928	Acrylic acid, β-2-thienyl-	-58
7103	Carbamic acid, dimethyldithio-, 2-thienyl ester	96
5488	Carbonic acid, trithio-, cyclic ester with ethylene glycol	97
3026, 3562	Dibenzothiophene	86, 54
3535	-----, 2-chloro-	58
3748	-----, x-chloro-	96
3536	crude	91
3618	Hydroxylamine, N,N-di-2-thenyl-, hydrochloride	89
3573	Ketone, methyl 3-thianaphthenyl	95
3734	-----, methyl 2-thienyl	90
4740	Pseudoindolium compounds. 1,3,3-trimethyl-2-[2-[[2-methylbenzothiazol-5(or 6)-yl]-amino]vinyl]-3H------ chloride	90
3743	Salicylic acid, 2-thenyl ester	59
7104	Sulfide, p-chlorobenzyl 2-thienyl	93
7073	Thianaphthene, 2-bromo-, 1,1-dioxide	86
3800	-----, 3-chloro-	86
7072	-----, 2,3-dibromo-2,3-dihydro-, 1,1-dioxide	92
3801	-----, 2,3-dichloro-	87
3563	-----, 2,3(?)-dichloro-	92
3795	-----, 1,1-dioxide	84
3577	-----, 3-nitro-	96
3803	-----, 2,3,x,x,x-pentachloro-	3
3802	-----, 2,3,x,x-tetrachloro-	38
3408	3-Thianaphthenol, 6-chloro-4-methyl-	76
3843	Thiocyanic acid, 2-thenoylmethyl ester	83
3856	2-Thiophenecarboxaldehyde, semicarbazone	73
3842	Thiophene, 5-chloro-2-(1,2-dithiocyanatoethyl)-	55
3054	-----, 2,5-dibromo-	54
3841	-----, 2-(1,2-dibromoethyl)-5-chloro-	86
5527	-----, 2,5-dihydro-, 1,1-dioxide	85
5872	-----, 2,5-dihydro-3-methyl-, 1,1-dioxide	85
3817, 7154*	-----, 2-(2-nitrovinyl)-	91, 97

TABLE I

Code No.	Classification and Name	K Value
	HYDRAZIDES	
	Unsubstituted	
3256, 7191	Acetic acid, 2-phenylhydrazide	77, 94
4388	-----, phenyl-, 2-phenylhydrazide	100
5751	Adipic acid, bis(2-phenylhydrazide)	7
4720	-----, dihydrazide	45
4962	Benzoic acid, cinnamylidenehydrazide	86
4960	-----, isopropylidenehydrazide	99
4546, 4961	-----, α-methylbenzylidenehydrazide	82, 89
3992	Crotonic acid, hydrazide	96
4386	Isocaproic acid, 2-phenylhydrazide	100
7293	Maleic acid, dihydrazide	20
4409	Oxalic acid, bis(2-phenylhydrazide)	79
5124	-----, dihydrazide	79
4389	Stearic acid, 2-phenylhydrazide	55
	Substituted	
5536	Acetic acid, cyano-, hydrazide	91
6701	Allophanic acid, 5-nitrofurfurylidenehydrazide	49
5000	p-Anisic acid, phenylhydrazide	-40
7101	Benzenesulfonic acid, isopropylidenehydrazide, p,p'-oxybis-	87
4883	Benzoic acid, 2,2'-dithiodi-, bis(2,4-dichlorobenzylidene-hydrazide)	19
4882	dihydrazide, dihydrochloride	90
4881	-----, o-mercapto-, 2,4-dichlorobenzylidenehydrazide	10
7033	-----, m-nitro-, hydrazide	93
4945	-----, p-nitro-, benzylidenehydrazide	6
4946	butylidenehydrazide	95
4950	sec-butylidenehydrazide	88
4956	o-chlorobenzylidenehydrazide	55
4957	cinnamylidenehydrazide	64
4759, 4955	cyclohexylidenehydrazide	98, 99
4757, 4954	cyclopentylidenehydrazide	98, 95
4760, 4958	2-ethylbutylidenehydrazide	94, 97
4949	isopropylidenehydrazide	66
4764, 4947	α-methylbenzylidenehydrazide	86, 45
4944	methylenehydrazide	89
4952	(1-methyl-3-oxobutylidene)hydrazide	70
4763, 4951	piperonylidenehydrazide	74, 0
4953	propylidenehydrazide	97
4959	2,2,2-trichloroethylidenehydrazide	65
4963	-----, piperonylidenehydrazide	89
4921	Hexanoic acid, 2-phenylhyrazido-	96

TABLE I

Code No.	Classification and Name	K Value
	HYDRAZIDES	
	Substituted	
6061	Isoniazid	80
4559	Isonicotinic acid, 2-chloro-, hydrazide	88
6097	Oxamic acid, allyl-, 2,2-dimethylhydrazide	92
5770	phenylhydrazide	99
5514	Phenaceturic acid, hydrazide	97
6046	1,4-Phthalazinedione, 2,3-dihydro-5-(p-nitrobenzamido)-	-2
5973	Phthalic acid, 3-nitro-, hydrazide	29
7161*	Picolinic acid, hydrazide	98
	Pyridinium compounds.	
3613	1-(carboxymethyl)----- chloride, hydrazide	100
	HYDRAZINES AND DERIVATIVES	
	Unsubstituted	
3719	Benzaldehyde, azine	17
7189	-----, phenylhydrazone	67
7039	Butyraldehyde, phenylhydrazone	98
7282	Formamide, 1,1'-azobis-	17
3360	Hydrazine, 4-biphenylyl-, hydrochloride	87
5860	-----, 1,1-bis(2-ethylhexyl)-	79
5810	-----, butyl-, salt with 1 f. wt. oxalic acid	100
4396	-----, 1,2-dibenzoyl-	94
5858*	-----, 1,1-dibutyl-	94
5859*	-----, 1,1-dipentyl-	96
5806	-----, ethyl-, salt with 1 f. wt. oxalic acid	99
5808	-----, isopropyl-, salt with 1 f. wt. oxalic acid	97
3447	-----, 1-naphthyl-	95
3448	-----, 2-naphthyl-	46
5811	-----, pentyl-, salt with 1 f. wt. oxalic acid	99
4975	-----, phenyl-, hydrochloride	100
5809*	-----, propyl-, salt with 1 f. wt. oxalic acid	100
7279	1,2-Hydrazinedicarboxamide	54
4242	Hydrazobenzene	71
	Substituted	
5796*	Acetic acid, hydrazino-, methyl ester, hydrochloride	95
3976	p-Anisaldehyde, (2-benzothiazolyl)hydrazone	71
3977	Benzaldehyde, p-acetamido-, (2-benzothiazolyl)hydrazone	-15
4547	-----, o-ethoxy-, 2-benzoxazolylhydrazone	23
4563	-----, p-ethylsulfonyl-, 2-benzoxazolylhydrazone	-7
3975	-----, p-hydroxy-, (6-nitro-2-benzothiazolyl)hydrazone	-52

TABLE I

Code No.	Classification and Name	K Value
	HYDRAZINES AND DERIVATIVES	
	Substituted	
5550	Benzenesulfonic acid, p-hydrazino-	58
3892, 7066	Benzothiazole, 2-hydrazino-	(T)
4374	Carbazic acid, 2-(2,5-dichlorophenyl)-, isopropyl ester	58
4552*	-----, dithio-, ammonium salt	97
4553	methyl ester	(T)
5795	-----, 2-(2-hydroxyethyl)-, γ-lactone, hydrochloride	97
5798	-----, 2-(2-hydroxypropyl)-, γ-lactone, hydrochloride	95
4898	-----, 3-methyl-3-phenyl-, isopropyl ester	98
4914	-----, 3-phenyl-, 2-chloroethyl ester	52
4365, 5484	isopropyl ester	96, 68
5554	-----, 3-(2,4,6-trichlorophenyl)-, isopropyl ester	90
4091	Cyclohexanone, 2,4-dinitrophenylhydrazone	74
4134	2-Furaldehyde, azine	97
4761	2-Heptanone, 2,2-dinitrophenylhydrazone	90
5807	Hydrazine, (2-aminoethyl)-, monooxalate	64
4548	-----, 1-(10-undecenoyl)-2-(4-pyridylcarbonyl)-	100
4976	Mesityl oxide, 2,4-dinitrophenylhydrazone	40
6711	Octadecanophenone, 2'-chloro-, 2,4-dinitrophenylhydrazone	-11
5289	Phosphorohydrazidic acid, 2-phenyl-, diethyl ester	74
6979	1,4-Phthalazinedione, 5-amino-2,3-dihydro-	42
5813	Propionitrile, 3-hydrazino-, monosulfate	89
5079	-----, 2,2'-hydrazonodi-	100
5841	3,6-Pyridazinedione, 4,5-dichloro-1,2-dihydro-	79
7294	-----, 1,2-dihydro-, 2,2'-iminodiethanol salt	22
7106	4H-1,2,4-Triazole, 4-amino-3-hydrazino-5-mercapto-	96
6995	p-Urazine	20
	HYDROCARBONS	
7201	Benzene, ethynyl-	57
3394	1,1'-Binaphthyl	-27
6275	Fluoranthene	-16
3395	Methane, (4-tert-butyl-2,6-dimethylcyclohexyl)(4-tert-butyl-2,6-xylyl)-	2
3368, 4200	-----, diphenyl-	97, 99
4157	-----, diphenyl-p-tolyl-	85
4566, 4647	Naphthalene, compound with 1,3,5-trinitrobenzene	100, 100
2894	-----, 1,6-dimethyl-	75
2896	-----, 2,3-dimethyl-	44
2895	-----, 2,6-dimethyl-	29
2897	-----, 2,7-dimethyl-	73
2898	-----, 2,3,6-trimethyl-	57
6276	Pyrene	-35

TABLE I

Code No.	Classification and Name	K Value
	HYDROXY DERIVATIVES OF HETEROCYCLIC COMPOUNDS	
5280	Alloxantin	33
5920	Butyric acid, 2,4-dihydroxy-3,3-dimethyl-, γ-lactone	36
4863	d-Catechol	31
3603	Coumarin, 3-acetyl-4-hydroxy-	99
5270	-----, 5,7-dihydroxy-4-methyl-	45
7129	-----, 3,3'-thiobis[4-hydroxy-	64
4866	Flavanone, d-3,3,4,5,7-pentahydroxy-	28
2910	Hydrouracil, 6-imino-5-isonitroso-	-35
4492	Isonicotinic acid, 2,6-dihydroxy-	49
3711	Maltol	28
5389	Naringenin	34
6063	2-Phenazinol, 8-amino-7-methyl-	20
6305	3-Piperidinol, 1-ethyl-, hydrochloride	28
6368	4H-Pyran-4-one, 2-benzoyl-3-hydroxy-6-(hydroxymethyl)-	13
5325	3,6-Pyridazinediol, 4-methyl-	18
3889	2-Pyridinol	87
6626	2H-Pyrido[1,2a]pyrimidin-3-ol, 3,4-dihydro-, monohydrochloride	72
3133, 7221	4-Pyrimidinol, 2,6-diamino-5-nitroso-	-9, -48
6036	2-Pyrimidinol, 4,6-dimethyl-, complex with 1 f. wt. 4,4'-dinitrocarbanilide	45
5996	3-Quinolinecarboxylic acid, 7-chloro-4-hydroxy-	59
3984	-----, 8-chloro-4-hydroxy-7-methyl-, ethyl ester	28
4149	4-Quinolinol, 5-chloro-	94
2886	8-Quinolinol	86
2887, 3733	phosphate	75, 69
3633	salt with 1 f. wt. benzoic acid	63
3731	salt with 1 f. wt. maleic acid	63
3625	salt with 1 f. wt. salicylic acid	95
3474	sulfate	61
3051	-----, 5,7-dibromo-	15
6776	-----, 5,7-dichloro-, copper(II) derivative	34
3478	-----, 5,7-dinitro-	81
6797	Tartaric anhydride, diacetyl-	37
3408	3-Thianaphthenol, 6-chloro-4-methyl-	76
4558	2-Thiazolol, 4-methyl-	86
5273	Umbelliferone, 3-benzyl-4-methyl-	70
3324, 7029	-----, 4-methyl-	42, 57
	HYDROXYLAMINES AND DERIVATIVES	
	Unsubstituted	
7030	3-Butanone, 1-phenyl-, oxime	74
7026	Dibenzyl ketone, oxime	49

TABLE I

Code No.	Classification and Name	K Value
	HYDROXYLAMINES AND DERIVATIVES	
	Unsubstituted	
7199	Glyoxime, dimethyl-	89
7186	α-Glyoxime, diphenyl-	65
7027	3-Pentanone, 1,5-diphenyl-, oxime	66
5517	1(2H)-Phenanthrone, 3,4-dihydro-, oxime	67
6015	1,2-Propanedione, 1-phenyl-, dioxime	54
7025	Propiophenone, 3-phenyl-, oxime	55
	Substituted	
4119	Acetoacetic acid, 2-(2,2,2-trichloro-1-hydroxyamino-ethyl)-, ethyl ester	45
6268	Acetone, O-(p-chlorophenylcarbamoyl)oxime	81
5909	-----, O-(phenylcarbamoyl)oxime	65
6249	-----, O-(m-tolylcarbamoyl)oxime	54
6322	-----, O-(2,5-dichlorophenylcarbamoyl)oxime	31
4234	Acetophenone, p-chloro-, oxime	83
3886	p-Anisaldehyde, oxime	81
4472	Benzaldehyde, 3,4-dichloro-, O-(3,4-dichlorobenzyl)oxime	52
7046	α-Benzil, monooxime	93
7045	Benzoin, anti-oxime	98
6228	2,3-Butanedione, monooxime	32
6306	-----, O-(phenylcarbamoyl)monooxime	3
2986	2-Butanone, 3,3'-(ethylenedinitrilo)di-, dioxime,	-32
2987	iron(II) complex	40
6250	-----, O-(phenylcarbamoyl)oxime	61
2988	-----, 3,3'-(o-phenylenedinitrilo)di-, dioxime	61
3263	Caproic acid, α-oxo-, oxime, ethyl ester	86
6252	Cyclohexanone, O-(phenylcarbamoyl)oxime	-10
7032	2-Furaldehyde, oxime	89
5799	-----, 5-nitro-, anti-oxime	89
2910	Hydrouracil, 6-imino-5-isonitroso-	-35
3618	Hydroxylamine, N,N-di-2-thenyl-, hydrochloride	89
6307	3-Pentanone, O-(phenylcarbamoyl)oxime	77
4466	Piperonal, oxime	89
5876	Propionaldehyde, 2-(dimethylamino)-2-methyl-, oxime	98
5908	Pyruvic acid, (4-hydroxy-3-methoxyphenyl)-, oxime	27
4261	Salicylaldehyde, 3,5-dichloro-, oxime	94
7044	-----, oxime	98

TABLE I

Code No.	Classification and Name	K Value
	IMIDES	
	Unsubstituted	
5844	Bicyclo[2.2.1]hept-5-ene-2,3-dicarboximide, N-ethyl-	79
5851	-----, N-(2-ethylhexyl)-	83
2982	-----, N-pentyl-	78
3061	Citraconimide	98
2952	-----, N-phenyl-	94
2954	-----, N-p-tolyl-	97
2949	Glutarimide	20
2941	-----, N-ethyl-	72
2950	-----, N-phenyl-	63
6272	Homophthalimide, N-phenyl-	16
3062	Itaconimide	85
3170, 6733*	Maleimide	99, 100
4811, 5113	-----, N-butyl-	100, 100
2968	-----, N-dodecyl-	87
3113	-----, N-ethyl-	79
6734	-----, N-isopropyl-	83
3112, 4326	-----, N-methyl-	100, 100
3786, 6735*	-----, N-phenyl-	81, 98
6736	-----, N,N'-(1,3-phenylene)bis-	76
3810, 5840	-----, N-o-tolyl-	92, 98
2965	-----, N-p-tolyl-	51
3708	Phthalimide	30
2948	-----, N-allyl-	94
3346	-----, N-benzyl-	48
3260, 4861	-----, N-butyl-	85, 97
2963	-----, N-decyl-	83
2925	-----, N-dodecyl-	-17
2928, 4384	-----, N-ethyl-	54, 90
5976	-----, N,N'-ethylenebis-	52
3114	-----, N-hexyl-	90
2960	-----, N-isobutyl-	97
2947, 4385	-----, N-isopropyl-	77, 100
2927	-----, N-methyl-	62
5974	-----, N-(1-methylheptyl)-	41
5392	-----, N-(1-naphthyl)-	50
3606	-----, N-(2-naphthyl)-	45
2924, 4359	-----, N-octyl-	65, 88
2967	-----, N-pentyl-	95
3258	-----, N-phenyl-	-6
2923	-----, N-propyl-	71
5843	-----, 1,2,3,6-tetrahydro-, N-ethyl-	89
2962, 5530	-----, N-m-tolyl-	-277, 44
2961, 3607	-----, N-o-tolyl-	50, 54
2926	-----, N-p-tolyl-	-9

TABLE I

Code No.	Classification and Name	K Value
	IMIDES	
	Unsubstituted	
6333	Pyromellitic acid, diimide, N,N'-diallyl-	39
6343	-----, diimide, N,N'-dibenzyl-	-85
6334	-----, diimide, N,N'-dibutyl-	-1
6336	-----, diimide, N,N'-di-sec-butyl-	35
6337	-----, diimide, N,N'-di-tert-butyl-	25
6330	-----, diimide, N,N'-diethyl-	88
6351	-----, diimide, N,N'-di(2-ethylhexyl)-	-19
6341	-----, diimide, N,N'-diheptyl-	-17
6340	-----, diimide, N,N'-dihexyl-	-13
6335	-----, diimide, N,N'-diisobutyl-	-143
6332	-----, diimide, N,N'-diisopropyl-	37
6325	-----, diimide, N,N'-dimethyl-	63
6338	-----, diimide, N,N'-di(1-methylbutyl)-	0
6342	-----, diimide, N,N'-dioctyl-	-59
6339	-----, diimide, N,N'-dipentyl-	-18
6326	-----, diimide, N,N'-diphenyl-	8
6331	-----, diimide, N,N'-dipropyl-	22
6327	-----, diimide, N,N'-di-m-tolyl-	1
6328	-----, diimide, N,N'-di-o-tolyl-	-39
6329	-----, diimide, N,N'-di-p-tolyl-	10
2946	Succinimide, N-allyl-	71
5683	-----, 2-benzyl-3,3-dimethyl-	79
2955	-----, 2,N-dimethyl-	18
2943	-----, N-ethyl-	0
5682	-----, N-(2-ethylhexyl)-2-methyl-	76
2956	-----, N-ethyl-2-methyl-	52
3115	-----, N-hexyl-	48
2966	-----, N-isobutyl-	14
2944	-----, N-isopropyl-	-3
2942	-----, N-methyl-	-68
2969, 5681	-----, 2-methyl-	49, 49
2958	-----, 2-methyl-N-phenyl-	27
2957	-----, 2-methyl-N-propyl-	23
2959, 3116	-----, 2-methyl-N-p-tolyl-	45, 11
2945	-----, N-propyl-	35
5693, 5922	-----, 2,2,3,3-tetramethyl-	100, 100
5121, 5684	-----, N-vinyl-	88, 77
	Monosubstituted	
	Acids	
2935	Acetic acid, (1,4-methano-1,2,3,4-tetrahydrophthalimido)-	67

TABLE I

Code No.	Classification and Name	K Value
	IMIDES	
	Monosubstituted	
	Acids	
5979	Butyric acid, 4-phthalimido-	83
6449	Levopimaric acid, addition product with N-phenylmaleimide	-42
	Alcohols	
6738*	Maleimide, N-hydroxymethyl-	99
3257	Phthalimide, N-2-hydroxyethyl-	46
6050	-----, N-(3-hydroxy-4-hexenyl)-	76
5987	-----, N-(3-hydroxy-3-methylbutyl)-	76
6049	-----, N-(3-hydroxy-3-methylpentyl)-	71
	Amides	
4827	Acrylamide, N-(phthalimidomethyl)-	61
6741	Maleimide, N-tert-butylcarbamoyl-	85
6740	-----, N-carbamoyl-	87
4817	Phthalimide, 4-acetamido-	56
7099	Succinimide, N-carbamoyl-	42
	Amines	
5768	Maleimide, N-anilino-	68
4818	Phthalimide, o-amino-	66
6478	-----, N-(5-amino-2-methylbenzyl)-	20
5262	-----, N-(anilinomethyl)-	60
5266	-----, N-[(4-biphenylamino)methyl]-	32
5260	-----, N-(m-toluidinomethyl)-	16
5263	-----, N-(2,4-xylidinomethyl)-	88
5267	-----, N-(2,5-xylidinomethyl)-	70
4824	Succinimide, α-anilino-N-phenyl-	-4
	Esters	
7009	Maleimide, N-acetoxymethyl-	95
6737*	-----, N-propionyloxymethyl-	98
4731	Phthalimide, N-2-hydroxyethyl-, oleate	8
4732	stearate	-116
5108	Succinimide, N-(2-acetoxyethyl)-	50
4730	-----, N-(2-hydroxy-1,1-dimethylethyl)-, oleate	66
	Ethers	
6357	Pyromellitic acid, diimide, N,N'-bis(m-ethoxyphenyl)-	-7
6358, 6359	-----, diimide, N,N'-bis(p-ethoxyphenyl)-	39, -16
6355	-----, diimide, N,N'-bis(m-methoxyphenyl)-	-36
6354	-----, diimide, N,N'-bis(o-methoxyphenyl)-	-11
6356	-----, diimide, N,N'-bis(p-methoxyphenyl)-	-59

TABLE I

Code No.	Classification and Name	K Value
	IMIDES	
	Monosubstituted	
	Halides	
5845	Bicyclo[2.2.1]hept-5-ene-2,3-dicarboximide, 1,4,5,6,7,7-hexachloro-N-ethyl-	74
2934	Bicyclo[2.2.1]hept-2-ene-5,6-dicarboximide, 1,2,3,4,7,7-hexachloro-N-pentyl-	-65
5823	Maleimide, N-allyl-2,3-dichloro-	100
5833	-----, N-benzyl-2,3-dichloro-	55
3808	-----, N-(m-chlorophenyl)-	73
3807	-----, N-(o-chlorophenyl)-	80
3809	-----, N-(p-chlorophenyl)-	84
5835	-----, 2,3-dichloro-N-cyclohexyl-	56
5829	-----, 2,3-dichloro-N-decyl-	89
5825	-----, 2,3-dichloro-N-ethyl-	100
5831	-----, 2,3-dichloro-N-(2-ethylhexyl)-	92
5828	-----, 2,3-dichloro-N-hexyl-	98
5827	-----, 2,3-dichloro-N-isobutyl-	100
5824	-----, 2,3-dichloro-N-methyl-	100
5834	-----, 2,3-dichloro-N-phenethyl-	33
5453	-----, 2,3-dichloro-N-phenyl-	24
5826	-----, 2,3-dichloro-N-propyl-	98
5837	-----, 2,3-dichloro-N-(m-tolyl)-	19
5836	-----, 2,3-dichloro-N-(o-tolyl)-	77
5838	-----, 2,3-dichloro-N-(p-tolyl)-	51
5687	Phthalimide, N-[bis(p-chlorophenyl)methyl]-	65
5338, 5975	-----, N-(2-bromoethyl)-	59, 84
7058	-----, x-(2-bromoethyl)-	93
3722	-----, N-(3-bromopropyl)-	70
4412	-----, N-(m-chlorophenyl)-	26
5686	-----, tetrachloro-	95
6345	Pyromellitic acid, diimide, N,N'-bis(m-chlorophenyl)-	-43
6344	-----, diimide, N,N'-bis(o-chlorophenyl)-	-102
6346	-----, diimide, N,N'-bis(p-chlorophenyl)-	-12
6350	-----, diimide, N,N'-bis(3-chloro-2-tolyl)-	-61
7087	Succinimide, 2-chloro-3-(x-chlorophenyl)-N-phenyl-	.58
3226	-----, 2-chloro-N-phenyl-	86
	Heterocyclic Compounds	
5846	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboximide, N-ethyl-	54
5879	-----, N-1-naphthyl-	32
6424	Phthalimide, N-(3-methylpyrid-2-yl)-	91
6433	-----, N-(6-methylpyrid-2-yl)-	77
5259	-----, N-(morpholinomethyl)-	69

TABLE I

Code No.	Classification and Name	K Value
	IMIDES	
	Monosubstituted	
	Heterocyclic Compounds	
6348	Pyromellitic acid, diimide, N,N'-bis(3-methylpyrid-2-yl)-	98
6349	-----, diimide, N,N'-bis(6-methylpyrid-2-yl)-	75
6347	-----, diimide, N,N'-di(2-pyridyl)-	-52
	Ketones	
5424	Phthalimide, N-(9-oxofluoren-2-yl)-	-17
4306	-----, N-phenacyl-	21
	Nitro Compounds	
6051	Phthalimide, N-butyl-3-nitro-	84
6324	-----, N-dodecyl-4-nitro-	98
5980	-----, N-ethyl-3-nitro-	87
5985	-----, N-hexyl-3-nitro-	49
6055	-----, N-hexyl-4-nitro-	58
6045	-----, N-isobutyl-3-nitro-	55
5983	-----, N-isopropyl-3-nitro-	81
5981	-----, N-methyl-3-nitro-	72
6274	-----, 4-nitro-	87
5984	-----, 3-nitro-N-octyl-	59
6056	-----, 4-nitro-N-octyl-	94
5986	-----, 3-nitro-N-pentyl-	93
6052	-----, 3-nitro-N-phenethyl-	66
4387	-----, N-(m-nitrophenyl)-	63
6048	-----, 3-nitro-N-(2-phthalimidoethyl)-	-59
6054	-----, 4-nitro-N-(2-phthalimidoethyl)-	36
5982	-----, 3-nitro-N-propyl-	93
	Phenols	
5394	Bicyclo[2.2.1]hept-5-ene-2,3-dicarboximide, N-(p-hydroxyphenyl)-	81
5529	Phthalimide, N-(o-hydroxyphenyl)-	44
	Miscellaneous	
6763	Carbamic acid, thiol-, maleimidomethyl-, butyl ester	99
7102	Isocyanuric acid, triphenyl-	88
6764	Maleimide, N-benzylideneamino-	73
6759*	-----, N-thiocyanatomethyl-	99
5977	Phthalimide, N-(3-cyanopropyl)-	80
	Polysubstituted	
3459	Isocyanuric acid, trichloro-	97

TABLE I

Code No.	Classification and Name	K Value
	IMIDES	
	Polysubstituted	
5832	Maleimide, N-(2-acetamidoethyl)-2,3-dichloro-	95
5830	-----, 2,3-dichloro-N-(2-methoxyethyl)-	97
5327	Maleinimide, N-m-[bis(2-hydroxyethyl)amino]phenyl-	-3
5265	Phthalimide, N-[(m-bromoanilino)methyl]-	38
6047	-----, N-(2-bromoethyl)-3-nitro-	87
6053	-----, N-(2-bromoethyl)-4-nitro-	82
6057	-----, N-(o-chlorobenzyl)-4-nitro-	100
6058	-----, N-(p-chlorobenzyl)-4-nitro-	87
5261	-----, N-[(p-ethoxyanilino)methyl]-	-7
5264	-----, N-[(p-iodoanilino)methyl]-	37
5268	-----, N-[(p-methoxyanilino)methyl]-	71
5269	-----, N-[p-(methylcarbamoyl)anilinomethyl]-	74
6271	-----, 3,4,5,6-tetrachloro-N-[2-(diethylamino)ethyl]-	43
3712	-----, 1,2,3,6-tetrahydro-, N-trichloromethylthio-	57
6762	Succinimide, α-acetoxythio-N-carbamoyl-x-pentyl-	64
	IMINES	
	Unsubstituted	
6234, 7176	Aniline, N-benzylidene-	63, 83
5034	-----, N-fluoren-9-ylidene-	75
5928	Butylamine, N-benzylidene- 1,1,3,3-tetramethyl-	96
7175	Hydrobenzamide	48
3973	Propenylamine, N-isobutylidene-2-methyl-	45
	Substituted	
5029	Acetamide, N-(9-phenyliminofluoren-2-yl)-	63
4360	Acetophenone, 2-[p-(dimethylamino)phenylimino]-2-phenyl-	74
5031	p-Acetotoluidide, α-(2-fluorenylimino)-	40
3895	Aniline, N-benzylidene-m-nitro-	88
6255	-----, N-(2,4-dichlorobenzylidene)-	42
3893	-----, N-(m-nitrobenzylidene)-	66
6775	2,2'-Binaphthalene-1,1',6,6',7,7'-hexol, 8,8'-bis(hexyl-imino)methyl-5,5'-diisopropyl-3,3'-dimethyl-	-11
2987	2-Butanone, 3,3'-(ethylenedinitrilo)di-, dioxime, iron(II) complex	40
2984	o-Cresol, α-(p-ethoxyphenylimino)-	24
4982	-----, α-(o-hydroxyphenylimino)-	81
2983	-----, α-phenylimino-	88
4557	Cyclopentanecarbonitrile, 2-imino-3,3-diphenyl-	84
5543	1,3-Cyclopentanedicarboxylic acid, 4-(phenylimino)-5-oxo-, diethyl ester	41

TABLE I

Code No.	Classification and Name	K Value
	IMINES	
	Substituted	
6040	2-Fluorenamine, N-[p-(dimethylamino)benzylidene]-	53
6035	-----, N-(p-nitrobenzylidene)-	59
2910	Hydrouracil, 6-imino-5-isonitroso-	-35
6764	Maleimide, N-benzylideneamino-	73
5510	1,4-Naphthoquinone imine, 2-amino-, monohydrochloride	100
4424, 4981	Phenol, o-benzylideneamino-	75, 83
4983	-----, o-[(o-chlorobenzylidene)amino]-	67
4985	-----, o-[(p-chlorobenzylidene)amino]-	71
4984	-----, o-[(p-methoxybenzylidene)amino]-	72
4315	p-Phenylenediamine, N-benzylidene-	98
5032	-----, N,N'-bis(2,7-dinitrofluoren-9-ylidene)-	52
5038	-----, N,N'-bis(2-nitrofluoren-9-ylidene)-	51
6041	Quinoline, 2-(2-fluorenyliminomethyl)-	54
	Quinolinium compounds.	
6069	4-chloro-2-[p-(dimethylamino)phenyliminomethyl]-6-methoxy-1-methyl----- chloride	89
	INORGANIC COMPOUNDS	
2755	Aluminum chloride hydroxide, complex	47
3462	Ammonium pyrophosphate, $(NH_4)_4P_2O_7$	75
3461	Ammonium pyrophosphate, $(NH_4)_2H_2P_2O_7$	59
4196	Barium bromide	33
6992	Boron oxide, B_2O_3	42
6991	Lithium hydroxide, monohydrate	74
4199	Magnesium bromide	24
6981	Molybdenum oxide, MoO_3	(T)
3278	Nickel tungstate(VI), $NiWO_4$	-20
3277	Nickel sulfamate	37
6993	Sodium borate, decahydrate, $Na_2B_4O_7.10H_2O$	(T)
6980	Sodium molybdate(VI), Na_2MoO_4	25
	IODONIUM COMPOUNDS	
3120	Bismuthine, triphenyl-, triiodium chloride	83
	Iodonium compounds.	
3429	bis(acetamidophenyl)----- chloride	(T)
3123	bis(acetoacetamidophenyl)----- iodide	83
3545	bis(acetophenyl)----- iodide	71
3544	bis(acetoureidophenyl)----- iodide	69
3432	bis(aminophenyl)----- iodide	52
2861	bis(2-bromo-4-chlorophenyl)----- chloride	88
2862	bis(2-bromo-4-chlorophenyl)----- iodide	91
2863	bis(2-bromo-4-chlorophenyl)----- sulfate	87

TABLE I

Code No.	Classification and Name	K Value
	IODONIUM COMPOUNDS	
	Iodonium compounds.	
2870	bis(p-bromophenyl)----- chloride	92
2871	bis(p-bromophenyl)----- iodide	65
2872	bis(p-bromophenyl)----- sulfate	73
3431	bis(tert-butylphenyl)----- chloride	93
3430	bis(carboxymethylphenyl)----- iodide	-8
3543	bis(carboxyphenyl)----- iodide	(T)
2864	bis(2,4-dichlorophenyl)----- chloride	82
2865	bis(2,4-dichlorophenyl)----- iodide	90
2866	bis(2,4-dichlorophenyl)----- sulfate	79
2867	bis(3,4-dichlorophenyl)----- chloride	87
2868	bis(3,4-dichlorophenyl)----- iodide	88
2869	bis(3,4-dichlorophenyl)----- sulfate	83
2873	bis(p-fluorophenyl)----- chloride	100
2874	bis(p-fluorophenyl)----- iodide	(T)
3546	bis(lauramidophenyl)----- iodide	20
3428	bis(methylphenyl)----- chloride	91
3427	bis(tert-pentyl)----- chloride	89
3542	diphenyl----- chloride	80
	IRON COMPOUNDS	
2987	2-Butanone, 3,3'-(ethylenedinitrilo)di- dioxime, iron(II) complex	40
5214	Iron, dicyclopentadienyl-	90
	ISOCYANATES	
6986	3,3'-Bitolyl, 4,4'-diisocyanato-	-16
3741	Isocyanic acid, 2-biphenylyl ester	27
7074	dihydroabietyl ester	91
6739	isopropyl ester	87
6987	4,4'-methylenebisphenyl ester	46
6985	Toluene, 2,4-diisocyanato-	5
6984	-----, 2,4-(and 2,6-)diisocyanato, 80/40 mixture	34
6983	65/35 mixture	26
	KETONES	
	Unsubstituted	
	Monoketones	
3914	Anthrone, 10-methylene-	75
7177, 7197	Benzophenone	99, 99
4138, 6000	3-Buten-2-one, 4-phenyl-	75, 73
6977	Carvone	93

TABLE I

Code No.	Classification and Name	K Value
	KETONES	
	Unsubstituted	
	Monoketones	
4303	Chalcone, 4-methyl-	49
3404	-----, 2',4',6'-trimethyl-	84
7023	Cyclohexanone	15
7024	-----, 4-methyl-	39
4171	2-Cyclohexen-1-one, 3-(4-biphenylyl)-	-19
4168	-----, 3-p-tolyl-	79
4542	Cyclopentanone, 2,2-diphenyl-	63
5999	2,4-Pentadienophenone, 5-phenyl-	62
7203	Pentanophenone	94
6004	2-Propanone, 1,3-diphenyl-	74
3010	Pulegone	99
3894	12-Tricosanone	11
5398	d-cis-Verbanone	47
5400	l-cis-Verbanone	47
5399	dl-cis-Verbanone	58
5220	d-Verbenone	51
	Polyketones	
3884	1,3-Butanedione, 2-butyl-1-phenyl-	93
6001	-----, 1-phenyl-	50
3078	2-Butene-1,4-dione, 4-(4-biphenylyl)-1,2-diphenyl-	25
3383	-----, trans-1,4-diphenyl-	2
3426	Camphorquinone	60
6093	1,3-Cyclobutanedione, tetramethyl-	15
4160, 6997	1,3-Cyclohexanedione, 5,5-dimethyl-	39, 42
3076	Cyclohexanone, 2-(α-phenacylbenzyl)-	55
3075	Cyclohexene, 4,5-dibenzoyl-	41
3077	-----, 4,5-dibenzoyl-2-phenyl-	49
3073	Cyclopentanone, 2-(α-phenacylbenzyl)-	69
2905	Cyclopropane, 1,2-dibenzoyl-3-phenyl-	-63
3942	2,4-Hexanedione, copper(II) derivative	86
5523	nickel(II) derivative	79
3883	-----, 5,5-dimethyl-	32
4148	1,3-Indandione, 2-cyclopropyl-, potassium derivative	81
4147	-----, 2-propionyl-, sodium derivative	98
3880	2,4-Nonanedione	19
3066	2,4-Pentanedione, nickel(II) derivative	80
3896	1,3-Propanedione, 1,3-diphenyl-	56
3935	1,3,5-Triacetylbenzene	70

TABLE I

Code No.	Classification and Name	K Value
	KETONES	
	Monosubstituted	
	Acids	
3638	Acrylic acid, trans-β-benzoyl-	79
3402	Benzoic acid, o-(β-isodurylyl)-	38
5405	Elaidic acid, 12-oxo-	34
3286	Levulinic acid, nickel(II) salt	12
5407	Octadecanoic acid, 9,12-dioxo-	20
5406	10-Octadecenoic acid, 12-oxo-	41
5403	-----, 9,12-dioxo-	20
5402	9-Octadecynoic acid, 12-oxo-	54
4103	Pinonic acid	53
2903	Propionic acid, β-(β-isodurylyl)-	27
	Alcohols	
6005	Acetophenone, 2-hydroxy-	65
7200	Adipoin	75
5494	2-Butanone, 3-hydroxy-3-methyl-	-23
4165	Cyclohexanone, 3-hydroxy-3-phenyl-	78
5272	-----, 2,2,6,6-tetrakis(hydroxymethyl)-	48
	Amides	
5416	Acetamide, N-(9-oxo-2-fluorenyl)-	93
4241	-----, 2-phenyl-N-(α-phenylphenacyl)-	-48
4840*, 6130	Acetanilide, 3'-acetyl-	91, 71
6120	-----, 4'-acetyl-	76
6105	-----, 4'-benzoyl-	82
5342	Acetoacetamide, N,N'-ethylenebis-	-25
5348	-----, N,N'-(4-methylphenylene)bis-	88
4014	Acetoacetanilide	28
5926	-----, 4',4"-methylenebis-	78
5953A	-----, 2'-phenyl-	60
5422	Benzamide, N-(9-oxo-2-fluorenyl)-	-54
4240	-----, N-(α-phenylphenacyl)-	-173
3611	Isatin, 1-acetyl-	17
3196	Levulinamide, N,N-diethyl-	62
6108	Propionanilide, 4'-acetyl-	85
6115	-----, 4'-benzoyl-	65
	Amines	
7194	Acetophenone, 4'-amino-	94
5393	Benzophenone, 4,4'-diamino-	91
3265	d-Camphor, 3-amino-, monosulfate	42
4309	Chalcone, 4-(dimethylamino)-	78
6027	9-Fluorenone, 2-amino-	79
5414	-----, 2-(methylamino)-	89

TABLE I

Code No.	Classification and Name	K Value
	KETONES	
	Monosubstituted	
	Amines	
6446	2-Pentanone, 4-ethyl-3-(dimethylamino)-	77
3455	2-Pentenophenone, 3-amino-	79
3881	2-Propanone, 1-diethylamino-	33
6541	1-Propanone, 1-(7-isopropyl-1-methyl-3-phenanthryl)-2-(dipentylamino)-, hydrochloride	45
5353	2'-Propionaphthone, 3-(dimethylamino)-, hydrochloride	63
3134	Propiophenone, 4'-amino-	93
	Esters	
5106	Acetoacetic acid, allyl ester	90
4884	1,3-Cyclopentanedicarboxylic acid, 4,5-dioxo-, diethyl ester	57
2907	Hydratropic acid, β-(4-biphenylylcarbonyl)-, methyl ester	50
3311	Pimelic acid, γ-oxo-, dibutyl ester	31
3308	didodecyl ester	-58
3310	diethyl ester	42
3309	dimethyl ester	24
6439	Pinonic acid, dodecyl ester	-20
	Ethers	
6003	3-Buten-2-one, 4-(p-methoxyphenyl)-	50
5274	Chalcone, α-ethyl-4,4'-dimethoxy-	98
2735	-----, 2-methoxy-	67
3074	-----, 4'-methoxy-	28
4164	2-Cyclohexen-1-one, 3-ethoxy-5,5-dimethyl-	64
4358	Cyclopentanone, 2,5-bis(p-methoxybenzylidene)-	32
5524	Propiophenone, 3',4'-dimethoxy-	83
4170	-----, 4'-methoxy-3-phenyl-	8
	Halides	
7098	Acetophenone, 2,2,4'-trichloro-	73
7124	-----, m-trichloromethyl-	68
2845, 4219	Benzophenone, 4-chloro-	91, 77
4203	Camphor, α-bromo-	67
4173	Chalcone, 4-chloro-	30
2843	2,5-Cyclohexadien-1-one, hexachloro-	(T)
4177	2-Cyclohexen-1-one, 3-(m-chlorophenyl)-	63
4888, 4948	-----, 2,3,4,4,5,6,6-heptachloro-	84, 97
4378	1,3-Indanedione, 2-chloro-2-isovaleryl-	47
4377	-----, x,x-dichloro-2-propionyl-	53
3793, 4111	4,7-Methanoindene-1,8-dione, 2,3,3a,4,5,6,7,7a-octachloro-3a,4,7,7a-tetrahydro-	72, 64

TABLE I

Code No.	Classification and Name	K Value
	KETONES	
	Monosubstituted	
	Halides	
6010	Propiophenone, 4'-chloro-	56
	Heterocyclic Compounds	
6834, 7035	Acetone, furfurylidene-	97, 99
5854	-----, piperonylidene-	50
6363, 7028	Acrylophenone, 3-(2-furyl)-	69, 96
7120	Benzimidazole, 2-(2-benzoylethyl)-	65
2734	Chalcone, 3,4-methylenedioxy-	35
5415	1,4-Cyclohexanedione, 2,5-dimorpholino-	45
5496	3(2H)-Furanone, dihydro-2,2,5,5-tetramethyl-	-14
3629	Furil	(T)
5855	2-Heptanone, 1-piperonylidene-	56
4162	5H-Indeno[5,6-d]-1,3-dioxol-5-one, 6,7-dihydro-	78
5314, 5776	Ketone, 2-furyl methyl	45, 81
5318	-----, 2-furyl phenyl	99
3573	-----, methyl 3-thianaphthenyl	95
3734	-----, methyl 2-thienyl	90
5315	1-Propanone, 1-(2-furyl)-	74
6284	Propiophenone, 3-phenyl-3-piperidino-	81
7190	Xanthone	95
	Hydroxylamine Derivatives	
7046	α-Benzil, monooxime	93
6228	2,3-Butanedione, monooxime	32
6306	O-phenylcarbamoyl derivative	3
	Imides	
5424	Phthalimide, N-(9-oxofluoren-2-yl)-	-17
4306	-----, N-phenacyl-	21
	Lactams	
3674	Isatin	44
3414	-----, 7-methyl-	81
	Lactones	
4862	Acetoacetic acid, 2-(2-hydroxyethyl)-, γ-lactone	47
2906	Butyric acid, 4-benzoyl-4-hydroxy-2,3-diphenyl-, γ-lactone	-27
5161	Heptanoic acid, 3-(1-hydroxy-1-methyl)-6-oxo-, γ-lactone	60
4011	Santonin	82

TABLE I

Code No.	Classification and Name	K Value
	KETONES	
	Monosubstituted	
	Nitriles	
6012	Acetonitrile, benzoyl-	71
4549	1,1,3,3-Cyclohexanetetrapropionitrile, 2-oxo-	40
4406	1,1,3,3-Cyclopentanetetrapropionitrile, 2-oxo-	26
3617	Heptanedinitrile, 4-acetyl-4-(2-cyanoethyl)-	17
3608	-----, 4-acetyl-4-methyl-	98
3716	-----, 4-acetyl-4-phenyl-	70
4890	-----, 4-benzoyl-4-(2-cyanoethyl)-	47
4410	-----, 4-benzoyl-4-methyl-	91
5756	Pentanenitrile, 4-methyl-3-oxo-	65
3890	-----, 3-oxo-2-phenyl-	57
3095	Propanenitrile, 2-phenyl-3-(p-toluoyl)-	50
	Nitro Compounds	
7034	Acetophenone, m-nitrobenzylidene-	55
7133	Benzophenone, 4,4'-dinitro-	56
3888	1,3-Butanedione, 1-(m-nitrophenyl)-	58
2985	Butyrophenone, 4-nitro-3,4,4'-triphenyl-	-32
4181	Chalcone, 4-nitro-	-20
4308	-----, 4'-nitro-	40
	Phenols	
3434	Acetophenone, 2',5'-dihydroxy-	19
2975	-----, m-hydroxy-	76
3276	-----, p-hydroxy-	41
4342	-----, 2',4',5'-trihydroxy-	48
3565	Benzophenone, 2,4'-dihydroxy-	52
3566	-----, 4,4'-dihydroxy-	60
2828	-----, 4-hydroxy-	48
6002	3-Buten-2-one, 4-(o-hydroxyphenyl)-	34
3916	Chalcone, 2,2'-dihydroxy-	42
6031	9-Fluorenone, 2-hydroxy-	55
3564	Propiophenone, p-hydroxy-	42
3905	Salicil	19
	Quaternary Nitrogen Compounds	
	Ammonium compounds.	
4483	benzyl(4,4-dibenzoyl-2,2-dimethylbutyl)-dimethyl----- chloride	97
4482	benzyl(2,2-dimethyl-5-oxo-3-undecenyl)-dimethyl----- chloride	91

TABLE I

Code No.	Classification and Name	K Value
	KETONES	
	Monosubstituted	
	Sulfonamides	
4799	d-Camphorsulfonamide, N-butyl-	73
5433	p-Toluenesulfonamide, N-methyl-N-(9-oxo-2-fluorenyl)-	24
	Miscellaneous	
4304	Acetophenone, 2-benzylthio-	55
5276	Alloxan	40
3439	d-10-Camphorsulfonic acid	70
	Iodonium compounds.	
3545	bis(acetophenyl)----- iodide	71
3796	Thiocyanic acid, phenacyl ester	83
	Disubstituted	
	Acid-Heterocyclic Compounds	
5408	Octadecanoic acid, 10,11-epoxy-12-oxo-	74
5404	-----, 10,11-epoxy-9,12-dioxo-	22
	Alcohol-Heterocyclic Compounds	
6303	d-Fructose, 1-deoxy-1-morpholino-	-4
4009	Piperonyloin	-14
	Amide-Halides	
2922	Acetoacetanilide, 4'-chloro-	71
5749	-----, 4,4,4-trifluoro-	64
	Amine-Halides	
6677	Acetophenone, 2-[benzyl[(p-diethylamino)benzyl]-amino]-3',4'-dichloro-, dihydrochloride	61
6556	-----, 4'-bromo-2'-(N-methylanilino)-	32
6710	Ketone, 9(or 10)-bromo-3-phenanthryl (diethylamino)methyl	68
6641	Propiophenone, 3-(benzylmethylamino)-4'-chloro-, hydrochloride	88
	Amine-Heterocyclic Compounds	
5615	2-Pentanone, 4-(4,6-diamino-s-triazin-2-yl)-4-methyl-	68
4329	4-Penten-2-one, 3,3-bis[2-(4,6-diamino-s-triazin-2-yl)ethyl]-4-methyl-	40
6476	Propiophenone, 2-(benzylmethylamino)-3-morpholino-3-phenyl-	58

TABLE I

Code No.	Classification and Name	K Value
	KETONES	
	Disubstituted	
	Amine-Phenols	
6308	Acetophenone, 3',4'-dihydroxy-2-[(3-phenylpropyl)amino]-, hydrochloride	63
6087	3-Buten-2-one, 4-(p-hydroxy-N-methylanilino)-	37
	Ester-Halides	
3088	Acetophenone, 2-bromo-3'-hydroxy-, benzoate	47
3089	-----, 2-bromo-4'-hydroxy-, benzoate	59
	Heterocyclic-Nitro Compounds	
5802	3-Buten-2-one, 4-(5-nitro-2-furyl)-	94
5310, 5800	1-Propanone, 1-(5-nitro-2-furyl)-	100, 98
6481	Propiophenone, 2,3-dimorpholino-3-(m-nitrophenyl)-	14
	Miscellaneous	
6648	p-Acetanisidide, 2'-acetyl-	87
4407	Acetoacetic acid, α,α-bis(2-cyanoethyl)-, methyl ester	63
2890	-----, α-[bis[p-(dimethylamino)phenyl]methyl]-, ethyl ester	32
4360	Acetophenone, 2-[p-(dimethylamino)phenylimino]-2-phenyl-	74
2909	Benzoic acid, o-(p-bromobenzoyl)-	76
4320	-----, o-(p-hydroxybenzoyl)-	2
4952	-----, p-nitro-, (1-methyl-3-oxobutylidene)hydrazide	70
6620	Benzoin, 4,4'-dichloro-	72
4475	Benzophenone, 4-(2-hydroxyethoxy)-	62
3603	Coumarin, 3-acetyl-4-hydroxy-	99
7105	Cyclohexanone, 2-[(p-chlorophenyl)thio]-	97
5543	1,3-Cyclopentanedicarboxylic acid, 4-(phenylimino)-5-oxo-, diethyl ester	41
5779	2-Furanacrylic acid, cis/trans-α-acetyl-, ethyl ester	94
3790	2(5H)-Furanone, 3,4-dichloro-5-phenacyl-	91
	Iodonium compounds.	
3123	bis(acetoacetamidophenyl)----- iodide	83
3614	Isatin, 5,7-dinitro-	96
3711	Maltol	28
	Morpholinium compounds.	
6546	4-benzyl-4-[(2,5,8,11,14,17,20-heptamethyl-3,6,9,12,-15,18,21-heptoxo-23-hydroxy)tetracosyl]----- chloride	74
5409	Octadecanoic acid, 10,11-dihydroxy-9,12-dioxo-	60
6483	1-Penten-3-one, 1-(2-furyl)-5-morpholino-, hydrochloride	79
6482	1-Propanone, 1-(2,5-diphenyl-3-furyl)-3-morpholino-	85
5234	Propiophenone, 2-bromo-3',4'-dimethoxy-	66
3082	-----, 2,3-dibromo-4'-chloro-3-(3,4-methylenedioxyphenyl)-	6

TABLE I

Code No.	Classification and Name	K Value
	KETONES	
	Disubstituted	
	Miscellaneous	
	Pyridinium compounds.	
6317	1-(6-chloro-3-phenanthrylcarbonylmethyl)----- bromide	-36
6014	Pyruvic acid, (o-nitrophenyl)-	51
3351	-----, (p-nitrophenyl)-, methyl ester	1
6797	Tartaric anhydride, diacetyl-	37
3843	Thiocyanic acid, 2-thenoylmethyl ester	83
6411	Urea, 1-(1,1-dimethyl-3-oxobutyl)-3-(p-nitrophenyl)-2-thio-	78
6410*	-----, 3-(2-hydroxyethyl)-1-(1,1-dimethyl-3-oxobutyl)-2-thio-	98
	Polysubstituted	
4119	Acetoacetic acid, 2-(2,2,2-trichloro-1-hydroxyamino-ethyl)-, ethyl ester	45
6642	Acetophenone, 2-(benzylmethylamino)-3'-chloro-4'-ethoxy-, hydrochloride	87
2995	-----, 4'-[(2,2,2-trichloro-1-hydroxyethyl)amino]-	71
7226	9-Acridone, 3-chloro-7-methoxy-	-10
3452	Benzoic acid, 6-benzoyl-3-chloro-2-nitro-	84
3911	2-Cyclohexene-1,2-dicarboxylic anhydride, 5-acetyl-3-carboxymethyl-4,6,6-trihydroxy-6-methyl-, γ-lactone	44
4866	Flavanone, d-3,3,4,5,7-pentahydroxy-	28
5389	Naringenin	34
5233	Propiophenone, 3-chloro-4'-hydroxy-3'-hydroxy-	77
6368	4H-Pyran-4-one, 2-benzoyl-3-hydroxy-6-(hydroxymethyl)-	13
	LACTAMS	
4017	Acetic acid, (3,6-dioxo-2-phenyl-1,2,3,6-tetrahydro-pyridazin-4-yl)-	-5
7198	Benzenesulfonic acid, p-(4,5-dihydro-3-methyl-5-oxopyrazol-1-yl)-	51
5556	2H-1,4-Benzothiazine-2,3-diacetic acid, 3,4-dihydro-3-oxo-	29
4705*	4(3H)-Benzotriazinone	100
7254*	-----, 3-butyl-	95
7254A	-----, 3-phenyl-	68
4238	Caffeine, tetrahydro-	96
4926	Caproic acid, ε-amino-, lactam	77

TABLE I

Code No.	Classification and Name	K Value
	LACTAMS	
3781	Carbostyril, 1-methyl-	86
3229	-----, 4-methyl-	100
3674	Isatin	44
3614	-----, 5,7-dinitro-	96
3414	-----, 7-methyl-	81
4114	3-Morpholone	14
5766	Naphthostyril, 5-nitro-	99
3853	6(5H)-Phenanthridinone	27
4250	2,5-Piperazinedione	-65
5619	2-Piperazinone, 4-(4,6-diamino-s-triazin-2-yl)-3,3-dimethyl-	94
5620	Piperazone, 4-[4,6-bis(chloroamino)-s-triazin-2-yl]-1-chloro-3,3-dimethyl-	92
4936	3-Pyrazolecarboxylic acid, 5-oxo-, ethyl ester	55
6064	3,5-Pyrazolidinedione, 4-butyl-1,2-diphenyl-, sodium derivative	79
3615	5-Pyrazolone, 3-amino-1-phenyl-	58
6084	5(4H)-Pyrazolone, 4-isonitroso-3-methyl-1-phenyl-	60
3791	-----, 3-methyl-1-phenyl-	65
4018	4-Pyridazineacetic acid, 1,2,3,6-tetrahydro-3,6-dioxo-2-phenyl-, ethyl ester	13
3668	3(2H)-Pyridazinone, 4,5-dichloro-2-phenyl-	74
4931	3(2H)-Pyridazone, 4,5-dihydro-	96
3937	2(1H)-Pyridone, 3-cyano-4,6-dimethyl-	70
3765, 7040	-----, 1-methyl-	-4, 99
6700	Pyroglutamic acid, 3-pentyl-4-phenyl-	74
3198	2-Pyrrolidone, 5-methyl-	18
5329	-----, 1-vinyl-	82
6379	4(3H)-Quinazolinone, 3-[2-(diethylamino)ethyl]-, dihydrobromide	76
2803	Spiro[pseudoisoindole-1,9'-xanthen]-3(2H)-one, 3',6'-bis(diethylamino)-	-4
6705	Sulfamide, N'-antipyrinyl-N,N-dimethyl-	71
	LACTONES	
	Unsubstituted	
2833	1-Apocamphaneacetic acid, 2-hydroxy-, lactone	75
5007, 5564*	2-Biphenylcarboxylic acid, 2'-hydroxy-, δ-lactone	100, 97
3636	3,3'-Biphthalide	-32
4929	Caproic acid, β-hydroxy-, β-lactone	13
4417	Cinnamic acid, α-(β-hydroxy-p-methylstyryl)-, γ-lactone	44
7159	Coumarin, 4-methyl-	91
3986	2-Pentenoic acid, 4-hydroxy-, γ-lactone, dimer	79

TABLE I

Code No.	Classification and Name	K Value
	LACTONES	
	Unsubstituted	
3602	Phthalide	62
3254	-----, 3-benzylidene-	11
3783	-----, 3-ethylidene-	49
3382	-----, 3-phenyl-	45
3915	-----, 3-propylidene-	86
	Substituted	
4102	Acetic acid, (2-hydroxyethyl)-, lactone	-15
3470	-----, phthalidylidene-, ethyl ester	-4
4862	Acetoacetic acid, 2-(2-hydroxyethyl)-, γ-lactone	47
3767	1,3-Benzodioxan, 8-methoxy-2-methyl-4-oxo-	39
3820	1,3-Benzodioxan-4-one	86
3770	-----, 6-bromo-2-methyl-	87
3826	-----, 6-chloro-2,8-dimethyl-	88
3752	-----, 6-chloro-2-methyl-	78
3228	-----, 2-(o-chlorophenyl)-	54
3823	-----, 2-(2,6-dichlorophenyl)-	32
3753	-----, 2,8-dimethyl-	85
3736	-----, 2-methyl-	82
3824	-----, 2-(3,4-methylenedioxyphenyl)-	24
3825	-----, 8-methyl-2-(3,4-methylenedioxyphenyl)-	52
3232	-----, 2-(m-nitrophenyl)-	81
3227	-----, 2-phenyl-	84
3822	-----, 2-styryl-	-11
3413	Benzoic acid, 2-hydroxymercuri-3-nitro-, γ-lactone	98
6477	2H-1-Benzopyran-3-carboxylic acid, 8-allyl-2-oxo-, 2-(dibenzylamino)ethyl ester, hydrochloride	58
3771	1,3-Benzoxazine, 1-acetyl-4-oxo-2-phenyl-	66
3774	-----, 1-acetyl-2-trichloromethyl-4-oxo-	-50
6815	2-Biphenylcarboxylic acid, 5'-chloro-2'-hydroxy-, δ-lactone	95
6819	-----, 2'-hydroxy-5'(?)-nitro-, δ-lactone	78
2906	Butyric acid, 4-benzoyl-4-hydroxy-2,3-diphenyl-, γ-lactone	-27
5920	-----, 2,4-dihydroxy-3,3-dimethyl-, γ-lactone	36
5795	Carbazic acid, 2-(2-hydroxyethyl)-, γ-lactone, hydrochloride	97
5798	-----, 2-(2-hydroxypropyl)-, γ-lactone, hydrochloride	95
2789	α-Conidendrin, diacetate	41
2794	di-p-toluenesulfonate	22
2790	β-Conidendrin, diacetate	20
2795	di-p-toluenesulfonate	15

TABLE I

Code No.	Classification and Name	K Value
	LACTONES	
	Substituted	
2791	α-Conidendrol, tetraacetate	64
2793	tetrabenzoate	10
2792	β-Conidendrol, tetraacetate	30
3775	Coumalic acid, methyl ester	97
3603	Coumarin, 3-acetyl-4-hydroxy-	99
5270	-----, 5,7-dihydroxy-4-methyl-	45
3435	-----, 6-methoxy-4-methyl-	-5
7129	-----, 3,3'-thiobis[4-hydroxy-	64
3675	Crotonic acid, α-anilino-β-chloro-γ-hydroxy-γ-methoxy-, γ-lactone	34
3634	-----, 2-cyano-4-hydroxy-2,4-diphenyl-, γ-lactone	-78
3622	-----, 2,3-dichloro-4-hydroxy-4-phenyl-, γ-lactone	24
3911	2-Cyclohexene-1,2-dicarboxylic anhydride, 5-acetyl-3-carboxymethyl-4,6,6-trihydroxy-6-methyl-, γ-lactone	44
3623	2(5H)-Furanone, 3,4-dichloro-5-dodecyloxy-	82
3631	-----, 3,4-dichloro-5-hydroxy-, carbanilate	44
3790	-----, 3,4-dichloro-5-phenacyl-	91
3632	-----, 5,5'-oxybis[3,4-dichloro-	65
5169	Heptanedioic acid, 3-(1-hydroxy-1-methylethyl)-, γ-lactone	55
5161	Heptanoic acid, 3-(1-hydroxy-1-methylethyl)-6-oxo-, γ-lactone	60
3993	Hexanoic acid, 5-hydroxy-4,4-dimethyl-6-nitro-, δ-lactone	81
4891	2-Isoxazolin-5-one, 4-benzylidene-3-methyl-	51
3821	4H-Naphtho[2,3-d]-m-dioxin-4-one, 2-methyl-	71
2787	2-Naphthoic acid, 4-(3,4-dimethoxyphenyl)-1,2,3,4-tetrahydro-3-(hydroxymethyl)-6,7-dimethoxy-, γ-lactone (from α-conidendrin)	38
2788	γ-lactone (from β-conidendrin)	40
2801	Phthalide, 3,3-bis[p-(dimethylamino)phenyl]-	-239
2802	-----, 3,3-bis[p-(dimethylamino)phenyl]-6-(dimethylamino)-	-1
5275	-----, 3,3-bis(2,4,6-trihydroxy-m-tolyl)-	51
4011	Santonin	82
6391	o-Toluic acid, α-hydroxy-x-sulfo-, γ-lactone, copper(II) salt	60
5273	Umbelliferone, 3-benzyl-4-methyl-	70
3324, 7029	-----, 4-methyl-	42, 57
3940	Valeric acid, 5-hydroxy-4,4-dinitro-, δ-lactone	44

TABLE I

Code No.	Classification and Name	K Value
	MERCURY COMPOUNDS	
4495	Acetic acid, p-aminophenylmercury(II) salt	100
3399	2,3-dimethoxytetramethylenebis-, mercury(II) salt	100
2875	phenylmercury(II) salt	100
3413	Benzoic acid, 2-hydroxymercuri-3-nitro-, γ-lactone	98
3590	Benzothiazole, 2-phenylmercurithio-	75
4496*	Boric acid, triphenylmercuri(II) derivative	97
3961	Carbamic acid, bis(2-hydroxyethyl)dithio-, mercury(II) salt	-16
3953	-----, diethyldithio-, mercury(II) salt	72
3437	Furan, 2-chloromercuri-	94
4497	Gluconic acid, phenylmercury(II) salt	85
4499	Lactic acid, phenylmercury(II) salt	100
3372	Mercury, dibenzyl-	(T)
3135, 3586	-----, diphenyl-	100, (T)
4494	lactex	100
3592	-----, (dodecylthio)phenyl-	-11
4498	-----, nitratophenyl-	100
3591	-----, phenyl(phenylthio)-	94
3593	-----, phenyl(tetradecylthio)-	87
3957	4-Morpholinecarbodithioic acid, mercury(II) salt	92
4500*	Phthalic acid, phenylmercury(II) salt	90
3340	2-Propanol, 1-iodomercuri-	97
2760	Quinoline, 8-phenylmercurioxy-	83
6473	1,2,4-Thiadiazole, 3,5-bis(ethylmercurithio)-	65
3974	Thiazole, 2-acetamido-4,5-bis(acetoxymercuri)-	95
4137	2-Thiazolecarbamic acid, 4,5-bis(chloromercuri)-, benzyl ester	68
3271	Urea, (3-chloromercuri-2-methoxypropyl)-	69
	NICKEL COMPOUNDS	
3065	Acetic acid, nickel(II) salt, monohydrate	67
3291	-----, (2,4-dichlorophenoxy)-, nickel(II) salt	42
3093	Anthranilic acid, nickel(II) salt	26
3080	Benzoic acid, o-chloro-, nickel(II) salt	15
3081	-----, p-chloro-, nickel(II) salt	38
3292	-----, 3,4-dichloro-, nickel(II) salt	52
3106	Butyric acid, nickel(II) salt	54
3289	Caproic acid, α-ethyl-, nickel(II) salt	74
3282	Caprylic acid, nickel(II) salt	29
3096	Carbamic acid, ethylenebis[dithio-, nickel(II) salt	67
3070	Cinnamic acid, nickel(II) salt	42
3281	Citric acid, nickel(II) salt	24
3279	x-Cyclohexanebutyric acid, nickel(II) salt	-4
3280	x-Cyclohexanecaproic acid, nickel(II) salt	21

TABLE I

Code No.	Classification and Name	K Value
	NICKEL COMPOUNDS	
3288	x-Cyclohexanepropionic acid, nickel(II) salt	31
3284	Fumaric acid, nickel(II) salt, pentahydrate	20
3290	9-Hendecenoic acid, nickel(II) salt	-4
5523	2,4-Hexanedione, nickel(II) derivative	79
3069	Lactic acid, nickel(II) salt	76
3286	Levulinic acid, nickel(II) salt	12
3283	Linoleic acid, nickel(II) salt	41
2768	Nicotine, compound with ½ f. wt. nickel(II) salicylate and 1 f. wt. salicylic acid, monohydrate	93
3005	compound with 1/3 f. wt. nickel(II) thiocyanate	99
3066	2,4-Pentanedione, nickel(II) derivative	80
3068	Phthalic acid, nickel(II) salt	72
3067	Salicylic acid, nickel(II) salt	65
3071	Succinic acid, nickel(II) salt	76
3285	Valeric acid, nickel(II) salt	51
	NICOTINE DERIVATIVES	
2772	Nicotine, compound with 1/3 f. wt. aluminium(III) picrate	36
2770	compound with ½ f. wt. cadmium(II) benzoate	90
3002	compound with ½ f. wt. cadmium(II) o-benzoylbenzoate, trihydrate	100
2764	compound with ½ f. wt. cadmium(II) salicylate and 1 f. wt. salicylic acid, monohydrate	95
3006	compound with ½ f. wt. cadmium(II) thiocyanate	100
3063	compound with ½ f. wt. cadmium(II) thiocyanate and 1 f. wt. thiocyanic acid	99
3003	compound with ½ f. wt. cobalt(II) o-benzoylbenzoate, trihydrate	100
2765	compound with ½ f. wt. cobalt(II) salicylate and 1 f. wt. salicylic acid, monohydrate	91
3009	compound with ½ f. wt. cobalt(II) thiocyanate and 1 f. wt. thiocyanic acid	99
2771	compound with ½ f. wt. copper(II) benzoate, monohydrate	98
3001	compound with ½ f. wt. copper(II) o-benzoylbenzoate and 1 f. wt. o-benzoylbenzoic acid	94
2763	compound with ½ f. wt. copper(II) fumarate, pentahydrate	99
2762	compound with 1 f. wt. copper(II) phthalate and 1 f. wt. phthalic acid, hydrate	100
3004	compound with 1 f. wt. copper(II) thiocyanate	100
3007	compound with ½ f. wt. copper(II) thiocyanate and 1 f. wt. thiocyanic acid	100

TABLE I

Code No.	Classification and Name	K Value
	NICOTINE DERIVATIVES	
2767	Nicotine, compound with ½ f. wt. manganese(II) salicylate and 1 f. wt. salicylic acid, monohydrate	96
3008	compound with ½ f. wt. manganese(II) thiocyanate and 1 f. wt. thiocyanic acid	92
2768	compound with ½ f. wt. nickel(II) salicylate and 1 f. wt. salicylic acid, monohydrate	93
3005	compound with 1/3 f. wt. nickel(II) thiocyanate	99
2761	compound with 2 f. wt. zinc oxalate and 1 f. wt. oxalic acid, pentahydrate	94
2769	compound with ½ f. wt. zinc salicylate and 1 f. wt. salicylic acid, monohydrate	79
2774	compound with ½ f. wt. zinc thiocyanate	96
2773	compound with 1 f. wt. zinc thiocyanate and 1 f. wt. thiocyanic acid	89
	Nicotinium compounds.	
2776	bis(3,4-dichlorobenzyl)----- dichloride	75
2751	dibutyl----- dibromide	42
2804	didodecyl----- dipicrate	87
2807	diethylenebis----- dibromide	93
2741	dimethyl----- dibromide	7
2742	dimethyl----- diiodide	53
2784	dimethyl----- di-p-toluenesulfonate	52
	Pyrrolidinium compounds.	
2748	1-benzyl-1-methyl-2-(3-pyridyl)----- thiocyanate	89
2744	1-butyl-1-methyl-2-(3-pyridyl)----- thiocyanate	92
2727	1-butyl-1-methyl-2-(3-pyridyl)----- p-toluenesulfonate	97
2747	1-(o-chlorobenzyl)-1-methyl-2-(3-pyridyl)----- thiocyanate	93
2745	1-(2,4-dichlorobenzyl)-1-methyl-2-(3-pyridyl)----- chloride	90
2746	1-(3,4-dichlorobenzyl)-1-methyl-2-(3-pyridyl)----- chloride	80
2740	1,1-dimethyl-2-(3-pyridyl)----- bromide	62
2753	1-dodecyl-1-methyl-2-(3-pyridyl)----- chloride	84
2805	1-dodecyl-1-methyl-2-(3-pyridyl)----- oleate	88
2786	1-dodecyl-1-methyl-2-(3-pyridyl)----- p-toluene-sulfonate	83
2752	1,1'-ethylenebis[1-methyl-2-(3-pyridyl)----- bromide	94
2731	1-hexadecyl-1-methyl-2-(3-pyridyl)----- bromide	94
2725	1-hexadecyl-1-methyl-2-(3-pyridyl)----- thiocyanate	100
2785	1-hexadecyl-1-methyl-2-(3-pyridyl)----- p-toluene-sulfonate	85
2749	1-methyl-1-octyl-2-(3-pyridyl)----- iodide	92
2750	1-methyl-1-octyl-2-(3-pyridyl)----- thiocyanate	85

TABLE I

Code No.	Classification and Name	K Value
	NITRILES	
	Unsubstituted	
2857	Acetonitrile, diphenyl-	72
4826*, 5135	Acrylonitrile, 2-cyano-3-phenyl-	99, 99
3193	-----, 2,3-diphenyl-	90
4556	Adiponitrile, 2,2-diphenyl-	80
3761, 4297	Bicyclo[2.2.1]hept-5-ene-2,3-dicarbonitrile	(T), 100
3759	-----, 2-methyl-	79
3766	4-Cyclohexene-1,2-dicarbonitrile, 3,5-dimethyl-	89
7227	Cyclopentylacetonitrile	29
3764	9,10-Ethanoanthracene-11,12-dicarbonitrile, 9,10-dihydro-	-35
3042	Fumaronitrile	92
4022	Isovaleronitrile	-80
3533	Malononitrile	94
3045	-----, benzylidene-	94
3202	-----, 1-(4-biphenylyl)ethylidene-	-8
3206	-----, 1-(3,5-diethylphenyl)ethylidene-	75
3201	-----, 1-(m-ethylphenyl)ethylidene-	96
3195	-----, 1-phenylbutylidene-	62
3192	-----, 1-phenylethylidene-	69
3203	-----, 1,2,3,4-tetrahydro-1-naphthylidene-	87
3200	-----, 1-(p-tolyl)ethylidene-	42
3637	Phthalonitrile	96
7097	Pimelonitrile, 4,4-dicyano-	85
4850	Sebaconitrile	95
3844	Succinonitrile, phenyl-	85
	Monosubstituted	
	Amides	
4858, 5563	Acetamide, 2-cyano-	32, 9
5519	-----, N-cyanomethyl-2,2-diphenyl-	90
6765	Acrylamide, 3-cyano-	96
3778, 4853	Quinaldonitrile, 1-benzoyl-1,2-dihydro-	47, 64
	Amines	
2808	Acetonitrile, bis[p-(dimethylamino)phenyl]phenyl-	3
5882	-----, (ethylenedinitrilo)tetra-	76
7078	Benzonitrile, o-amino-, hydrochloride	65
4486	Cyanamide, dibenzyl-	85
5101	Glycinonitrile, N,N-diethyl-	26
5993	Hydratroponitrile, β-(benzylamino)-, hydrochloride	80
5992	-----, β-(cyclohexylamino)-, hydrochloride	94
5989	-----, β-(dimethylamino)-, hydrochloride	85
6269	-----, β-(ethylamino)-, hydrochloride	96
6383	-----, β-(isopropylamino)-, hydrochloride	94

TABLE I

Code No.	Classification and Name	K Value
	NITRILES	
	Monosubstituted	
	Amines	
5090	Propionitrile, 3-anilino-	67
5096	-----, 3-(N-ethylanilino)-	86
5093	-----, 3-(o-ethylanilino)-	90
5927	-----, 2,2'-(ethylenediimino)bis[2-methyl-	11
4856	-----, 3-(isopropylamino)-, salt with 1 f. wt. pentachlorophenol	92
5094	-----, 3-(N-methylanilino)-	97
6408	-----, 3-(octadecylamino)-	74
	Carbamates	
4366	Carbanilic acid, m-cyano-, isopropyl ester	87
4874	-----, 1-cyanoethyl ester	64
5024	Hydracrylonitrile, carbanilate	67
5026	Lactonitrile, 2-methyl-, carbanilate	67
	Esters	
4842	Acrylic acid, 2-cyano-3-phenyl-, ethyl ester	78
3738, 4852		53, 66
5906	Cinnamic acid, α-cyano-, ethyl ester	41
3755	Cinnamyl alcohol, cyanoacetate	4
3211	Fumaric acid, di(2-cyanoethyl) ester	67
4928	3-Pentenenitrile, 2-hydroxy-, acetate	63
4480	Pimelic acid, γ,γ-dicyano-, diallyl ester	100
4832	Propionitrile, 2-hydroxy-3-methyl-, acetate	6
4829*, 5116		100, 100
6443*	Tartronitrile, methyl-, acetate	99
	Ethers	
6017	Acetonitrile, (3,4-dimethoxyphenyl)-	77
5102	Butyronitrile, 2-phenoxy-	64
7076	Malononitrile, 3,4-diethoxybenzylidene-	94
3205	-----, 1-(p-ethoxyphenyl)ethylidene-	88
5081	Propionitrile, 3-(x-nonylphenoxy)-, branched C_9	94
5082	-----, 3-(p-tolyloxy)-	79
	Halides	
4851	Acetonitrile, 2,4,6-trichlorophenyl-	96
7096	Cinnamonitrile, o-chloro-α-phenyl-	87
3214	Fumaronitrile, chloro-	91
5750	Malononitrile, o-chlorobenzylidene-	91
5765	-----, p-chlorobenzylidene-	(T)

TABLE I

Code No.	Classification and Name	K Value
	NITRILES	
	Monosubstituted	
	Halides	
3101	Propionitrile, 3-bromo-	43
5086	-----, 2-chloro-	45
3109	-----, 3-chloro-	46
5100	-----, 2,2,3-trichloro-	45
	Heterocyclic Compounds	
5077, 6066	1-Aziridinepropionitrile	61, 42
3782	9-Carbazolylpropionitrile	43
3046, 7185	Malononitrile, furfurylidene-	100, 98
5411	4-Morpholinepropionitrile	86
3819, 4854	4-Morpholinesuccinonitrile	71, 86
7222	1-Piperidinebutyronitrile, α,α-diphenyl-	85
5076	1-Piperidinecarbonitrile	98
5991	1-Piperidinepropionitrile, α-phenyl-, hydrochloride	88
	Hydrazines and Derivatives	
5813	Propionitrile, 3-hydrazino-, monosulfate	89
5079	-----, 2,2'-hydrazonodi-	100
	Ketones	
6012	Acetonitrile, benzoyl-	71
4549	1,1,3,3-Cyclohexanetetrapropionitrile, 2-oxo-	40
4406	1,1,3,3-Cyclopentanetetrapropionitrile, 2-oxo-	26
3617	Heptanedinitrile, 4-acetyl-4-(2-cyanoethyl)-	17
3608	-----, 4-acetyl-4-methyl-	98
3716	-----, 4-acetyl-4-phenyl-	70
4890	-----, 4-benzoyl-4-(2-cyanoethyl)-	47
4410	-----, 4-benzoyl-4-methyl-	91
5756	Pentanenitrile, 4-methyl-3-oxo-	65
3890	-----, 3-oxo-2-phenyl-	57
3095	Propanenitrile, 2-phenyl-3-(p-toluoyl)-	50
	Nitro Compounds	
6013, 7077	Acetonitrile, p-nitrophenyl-	44, 88
7043	Benzonitrile, p-nitro-	(T)
5762	Malononitrile, m-nitrobenzylidene-	(T)
	Phenols	
7075	Malononitrile, p-hydroxybenzylidene-	96
4423	1-Naphthalenepropionitrile, 2-hydroxy-	58

TABLE I

Code No.	Classification and Name	K Value
	NITRILES	
	Monosubstituted	
	Phosphorus Compounds	
5084	Phosphonic acid, 2-cyanoethyl-, dihexyl ester	98
5083	dimethyl ester	26
	Sulfides	
5990	Hydratopropionitrile, 3-(butylthio)-	88
3756	Propionitrile, 3,3'-thiodi-	68
	Sulfones	
3776	Acetonitrile, benzenesulfonyl-	71
3780	Propionitrile, 3-benzenesulfonyl-	26
	Thiocarbamates	
3906	Carbamic acid, N-(2-cyanoethyl)-N-ethyldithio-, zinc salt	74
3216	-----, ethylenebis[N-(2-cyanoethyl)dithio-, copper(II) salt	29
3056	disodium salt	47
3057	zinc salt	70
	Miscellaneous	
4855	Acetanilide, p-(N-cyanosulfamoyl)-, N^4-calcium salt	51
5536	Acetic acid, cyano-, hydrazide	91
4491	Benzenesulfonamide, N,N-bis(2-cyanoethyl)-	91
4938*	Butyric acid, 4-cyano-2,2-dimethyl-	96
3634	Crotonic acid, 2-cyano-4-hydroxy-2,4-diphenyl-, γ-lactone	-78
4557	Cyclopentanecarbonitrile, 2-imino-3,3-diphenyl-	84
5099	1,2-Ethanediol, cyano-	(T)
2989	Guanidine, 1,3-dicyano-, potassium salt	36
5977	Phthalimide, N-(3-cyanopropyl)-	80
5097	Propionitrile, 3-(p-tolylthio)-	90
3937	2(1H)-Pyridone, 3-cyano-4,6-dimethyl-	70
3737	Thiooxanilonitrile	-9
	Polysubstituted	
	Amide-Esters	
5335	Acrylic acid, 3-(p-acetamidophenyl)-2-cyano-, ethyl ester	-15
5515	Phenaceturic acid, α-cyano-, ethyl ester	59

TABLE I

Code No.	Classification and Name	K Value
	NITRILES	
	Polysubstituted	
	Amine-Ethers	
4362	Acetonitrile, 2-(o-anisidino)-	100
5087	Propionitrile, 3-(o-anisidino)-	93
5088	-----, 3-(p-phenetidino)-	83
	Amine-Halides	
5091	Propionitrile, 3-(m-chloroanilino)-	71
5092	-----, 3-(o-chloroanilino)-	83
	Amine-Heterocyclic Compounds	
5429	s-Triazine, 2,2'-(3-cyano-3-phenylpentamethylene)-bis[4,6-diamino-	10
5606	-----, 2,6-diamino-4-[(1-cyanocyclohexyl)methylamino]-	59
5608	-----, 2,6-diamino-4-[[N-(cyanomethyl)-1,1,3,3-tetramethylbutyl]amino]-	21
5700	-----, 2,6-diamino-4-(o-cyanophenyl)-	87
5604	-----, 2,6-diamino-4-[(1-cyanopropyl)methylamino]-	-1
	Amine-Phenols	
4724	Propionitrile, 3,3'-[(2-hydroxynaphth-1-ylmethyl)imino]bis-	58
4481	-----, 3,3'-(5-phenylsalicylimino)bis-	74
	Carbamate-Halides	
4915	Carbanilic acid, m-cyano-, 2-chloroethyl ester	83
6263	Hydracrylonitrile, m-chlorocarbanilate	52
	Ether-Halides	
5075	Acetonitrile, 2,4-dichlorophenoxy-	100
5080	Propionitrile, 3-(o-chlorophenoxy)-	84
	Miscellaneous	
5015	Acetamide, N-(cyanoamidino)-	67
4407	Acetoacetic acid, α,α-bis(2-cyanoethyl)-, methyl ester	63
5910	Acetonitrile, (4-hydroxy-3-methoxyphenyl)-, acetate	33
4298, 4857	Butyronitrile, 2-hydroxyethyl-4-(methylthio)-	93, 87
3219	Carbamic acid, N-(2-cyanoethyl)-N-2-[[(2-cyanoethyl)-amino]ethyl]dithio-	63
6262	Cinnamic acid, p-chloro-α-cyano-	60
3805	2-Furanacrylamide, α-cyano-	71
3804	2-Furanacrylic acid, α-cyano-, ethyl ester	62
5186	Lactic acid, m-cyanocarbanilate, butyl ester	82
3233	Propionitrile, 3-(p-chlorophenylthio)-	97
5293	-----, 3-(2-hydroxyethoxy)-, m-chlorocarbanilate	63

TABLE I

Code No.	Classification and Name	K Value
	NITRILES	
	Polysubstituted	
	Miscellaneous	
4927	Propionitrile, 3-[N'-(2-hydroxyethyl)anilino]-, sulfate	56
3231	Sulfone, p-chlorophenyl cyanomethyl	91
5089	p-Toluenesulfonanilide, 3-chloro-N-(2-cyanoethyl)-	84
	NITRO COMPOUNDS	
	Unsubstituted	
4649	Benzene, 1,3,5-trinitro-, with 10 percent water	99
3242	Biphenyl, 2-nitro-	81
3713	-----, 3-nitro-	73
3181	-----, 4-nitro-	83
4079	1-Butene, 2-nitro-1-phenyl-	99
4080	1-Pentene, 2-nitro-1-phenyl-	100
4045	Propene, 2-nitro-1-(m-nitrophenyl)-	72
4078	-----, 2-nitro-1-phenyl-	92
4084	-----, 2-nitro-1-(p-tolyl)-	100
3730	Stilbene, x,x,x-trinitro-	30
7145	Styrene, m,β-dinitro-	80
3240, 4077*	-----, β-nitro-	100, 100
	Monosubstituted	
	Acids	
3350	Cinnamic acid, m-nitro-	31
5513	-----, o(and p)-nitro-	81
3938	Heptanedioic acid, 4,4-dinitro-	-10
3347	Phthalic acid, 3-nitro-	48
	Aldehydes	
3897	Benzaldehyde, m-nitro-	51
3998	-----, p-nitro-	74
	Amides	
5059	Acetanilide, 2',4'-dinitro-	100
6016	-----, N-methyl-4'-nitro-	57
5047	-----, 3'-nitro-	86
4403	Benzamide, N-benzyl-p-nitro-	95
4658	-----, N-butyl-p-nitro-	78
4659	-----, N-sec-butyl-p-nitro-	94
4400	-----, N-cyclohexyl-m-nitro-	74
4668	-----, N,N-dibenzyl-p-nitro-	-2
4390	-----, N,N-diethyl-p-nitro-	91

TABLE I

Code No.	Classification and Name	K Value
	NITRO COMPOUNDS	
	Monosubstituted	
	Amides	
4666	Benzamide, N,N-diisobutyl-p-nitro-	90
4401	-----, N,N-diisopropyl-m-nitro-	91
4394	-----, N,N-diisopropyl-p-nitro-	85
4398	-----, N-isobutyl-m-nitro-	86
4660	-----, N-isobutyl-p-nitro-	84
4392	-----, N-isopropyl-p-nitro-	87
4393	-----, N-methyl-p-nitro-	92
4395	-----, p-nitro-N,N-dipropyl-	90
4663	-----, p-nitro-N-pentyl-	89
3715	-----, N-(p-nitrophenethyl)-	71
4391	-----, p-nitro-N-propyl-	92
6437	Benzanilide, 2',4'-dinitro-	93
6434	-----, 2'-nitro-	67
6435	-----, 3'-nitro-	-31
6436	-----, 4'-nitro-	4
6186	Butyranilide, 2'-nitro-	41
5068	-----, 3'-nitro-	99
5069	-----, 4'-nitro-	98
5962	Phthalamide, N,N'-bis(o-nitrophenyl)-	47
5967	-----, N,N'-dicyclohexyl-, 3-nitro-	37
5969	-----, 3-nitro-, N,N'-dipentyl-	47
5971	Phthalanilide, N,N'-dibutyl-3-nitro-	24
5970	-----, 3-nitro-N,N'-dipentyl-	31
4419, 6111	Propionanilide, 2',4'-dinitro-	97, 96
5058	-----, 2'-nitro-	94
5057	-----, 3'-nitro-	91
	Amines	
4754	Aniline, N-allyl-2,4-dinitro-	88
4361	-----, N-ethyl-2,4-dinitro-	97
4307	-----, 4,4'-(p-nitrobenzylidene)bis[N,N-dimethyl-	51
4044	Benzylamine, N-(2-methyl-2-nitropropyl)-N-phenyl-	56
3525	Cyclohexylamine, N-(2,4-dinitrophenyl)di-	81
4770	Dibenzylamine, N-(2,4-dinitrophenyl)-	32
3941	1,5-Pentanediamine, 3,3-dinitro-, hydrochloride	85
5282	Toluene-2,4-diamine, 6-nitro-	96
6380	p-Toluidine, N,N-dimethyl-α-(2-nitro-9-fluorenylidene)-, low melting isomer	46
5281	-----, 3,5-dinitro-	78
6994	Triphenylamine, 2-nitro-	(T)

TABLE I

Code No.	Classification and Name	K Value
	NITRO COMPOUNDS	
	Monosubstituted	
	Carbamates	
5877	2-Benzoxazolinone, 5,6-dinitro-	88
5477	Carbamic acid, ethyl-, p-nitrophenyl ester	87
3939	-----, methyl ester, 3,3-dinitro-1,5-pentamethylenebis-	47
4670	Carbanilic acid, m-nitro-, isopropyl ester	94
5463	-----, p-nitro-, isopropyl ester	53
3304, 5013	Propanol, 2-methyl-2-nitro-, carbanilate	73, 95
	Esters	
4404	Benzoic acid, p-nitro-, p-nitrophenyl ester	39
4405	m-tolyl ester	91
6301	Cinnamic acid, m-nitro-, ethyl ester	45
5907	-----, p-nitro-, methyl ester	54
3947	o-Cresol, 4,6-dinitro-, acetate	97
	Ethers	
4980	Anisole, 5-allyl-2-(2,4-dinitrophenoxy)-	53
3887	-----, 3,5-dinitro-	78
3816	-----, o-(2-nitrovinyl)-	95
4765	Benzene, 1-allyl-4-(2,4-dinitrophenoxy)-3-methoxy-	44
4766	-----, p-bis(2,4-dinitrophenoxy)-	46
4085	1-Butene, 1-(p-methoxyphenyl)-2-nitro-	75
4977	Ether, benzyl 2,4-dinitrophenyl	96
4767	-----, 2-biphenylyl 2,4-dinitrophenyl	52
4768	-----, 4-biphenylyl 2,4-dinitrophenyl	60
4978	-----, cyclohexyl 2,4-dinitrophenyl	94
4769	-----, 2-cyclohexyl-4,6-dinitrophenyl 2,4-dinitrophenyl	75
4508	-----, o-cyclohexylphenyl 2,4-dinitrophenyl	75
4421	-----, 2,4-dinitrophenyl m-nitrophenyl	80
4422	-----, 2,4-dinitrophenyl 2-nitro-p-tolyl	64
7208	-----, o-nitrophenyl phenyl	96
4426	Naphthalene, 1,5-bis(2,4-dinitrophenoxy)-	36
7147*	Styrene, 3,4-dimethoxy-β-nitro-	86
7149*	Veratrole, 4-(2-nitropropenyl)-	97
	Halides	
4024	Benzene, 1,2-dichloro-4,5-dinitro-	99
6996	-----, 1,3-dichloro-4,6-dinitro-	98
3391	-----, 1,4-dichloro-2-nitro-	84
5193	-----, pentachloronitro-	71
5194	-----, 1,2,3,4-tetrachloro-5-nitro-	81
4876, 7111	-----, 1,2,4,5-tetrachloro-3-nitro-	79, 85
5551	-----, 1,2,4-trichloro-3,5-dinitro-	75

TABLE I

Code No.	Classification and Name	K Value
	NITRO COMPOUNDS	
	Monosubstituted	
	Halides	
3064	Biphenyl, x-chloro-2-nitro-	90
6267	Butane, 1-(p-chlorophenyl)-1-(3,4-dichlorophenyl)-2-nitro-	48
4034	1-Butene, 1-(o-chlorophenyl)-2-nitro-	100
4040	-----, 1-(p-chlorophenyl)-2-nitro-	80
4086	-----, 1-(2,4-dichlorophenyl)-2-nitro-	94
4087	-----, 1-(3,4-dichlorophenyl)-2-nitro-	76
6266	Cyclohexane, 1,2-dibromo-4-nitro-5-phenyl-	26
5557	Stilbene, 2'-chloro-2,4,6-trinitro-	-26
4090	Styrene, β-bromo-β-nitro-	91
3813, 7152	-----, 2-chloro-β,4-dinitro-	89, 93
3811	-----, o-chloro-β-nitro-	98
3812	-----, p-chloro-β-nitro-	81
3814, 7153	-----, 2,4-dichloro-β-nitro-	70, 83
3815	-----, 3,4-dichloro-β-nitro-	81
	Heterocyclic Compounds	
3321	1,3-Benzodioxan, 6-nitro-	57
7217	Benzofuran, 3-nitro-	27
5175	Benzofurazan, 5-methyl-4-nitro-, N^3-oxide	100
2737	1H-Benzotriazole, 6-nitro-	87
4081	1-Butene, 1-(2-furyl)-2-nitro-	100
4083	-----, 1-(3,4-methylenedioxyphenyl)-2-nitro-	70
3235	Carbazole, 1,3,6,8-tetranitro-, crude	91
5380	m-Dioxane, 2-ethyl-2,5-dimethyl-5-nitro-	94
5317, 5791	Furan, 2-nitro-	83, 73
3440, 3789		96, 100
4041*	-----, 2-(2-nitrovinyl)-	100
2728	-----, 2-[2-(2,4,6-trinitrophenyl)vinyl]-	30
3729	-----, 2-(2,4,6-trinitrostyryl)-	77
5874	Pyridine, 3-(3-nitro-2-pyrazolin-5-yl)-	95
4036	Pyrimidine, 1,3-bis(1-methylheptyl)-hexahydro-5-methyl-5-nitro-	86
4364	Stilbene, 3,4-methylenedioxy-2',4'-dinitro-	18
3610	Styrene, 3,4-methylenedioxy-β-nitro-	33
4252	-----, 2,4,6-trinitro-3-(5-nitro-2-furyl)-	91
3577	Thianaphthene, 3-nitro-	96
3817, 7154*	Thiophene, 2-(2-nitrovinyl)-	91, 97
	Hydrazides	
7033	Benzoic acid, m-nitro-, hydrazide	93

TABLE I

Code No.	Classification and Name	K Value
	NITRO COMPOUNDS	
	Monosubstituted	
	Hydrazides	
4945	Benzoic acid, p-nitro-, benzylidenehydrazide	6
4946	butylidenehydrazide	95
4940	sec-butylidenehydrazide	88
4957	cinnamylidenehydrazide	64
4759, 4955	cyclohexylidenehydrazide	98, 99
4757, 4954	cyclopentylidenehydrazide	98, 95
4760, 4958	2-ethylbutylidenehydrazide	94, 97
4949	isopropylidenehydrazide	66
4764, 4947	α-methylbenzylidenehydrazide	45, 86
4944	methylenehydrazide	89
4953	propylidenehydrazide	97
5973	Phthalic acid, 3-nitro-, hydrazide	29
	Hydrazines and Derivatives	
4091	Cyclohexanone, 2,4-dinitrophenylhydrazone	74
4761	2-Heptanone, 2,4-dinitrophenylhydrazone	90
4976	Mesityl oxide, 2,4-dinitrophenylhydrazone	40
	Imides	
6051	Phthalimide, N-butyl-3-nitro-	84
6324	-----, N-dodecyl-4-nitro-	98
5980	-----, N-ethyl-3-nitro-	87
5985	-----, N-hexyl-3-nitro-	49
6055	-----, N-hexyl-4-nitro-	58
6045	-----, N-isobutyl-3-nitro-	55
5983	-----, N-isopropyl-3-nitro-	81
5981	-----, N-methyl-3-nitro-	72
6274	-----, 4-nitro-	87
5984	-----, 3-nitro-N-octyl-	59
6056	-----, 4-nitro-N-octyl-	94
5986	-----, 3-nitro-N-pentyl-	93
6052	-----, 3-nitro-N-phenethyl-	66
4387	-----, N-(m-nitrophenyl)-	63
6048	-----, 3-nitro-N-(2-phthalimidoethyl)-	-59
6054	-----, 4-nitro-N-(2-phthalimidoethyl)-	36
5982	-----, 3-nitro-N-propyl-	93
	Imines	
3895	Aniline, N-benzylidene-m-nitro-	88
3893	-----, N-(m-nitrobenzylidene)-	66
6035	2-Fluorenamine, N-(p-nitrobenzylidene)-	59

TABLE I

Code No.	Classification and Name	K Value
	NITRO COMPOUNDS	
	Monosubstituted	
	Imines	
5032	p-Phenylenediamine, N,N'-bis(2,7-dinitrofluoren-9-ylidene)-	52
5038	-----, N,N'-bis(2-nitrofluoren-9-ylidene)-	51
	Ketones	
7034	Acetophenone, m-nitrobenzylidene-	55
7133	Benzophenone, 4,4'-dinitro-	56
3888	1,3-Butanedione, 1-(m-nitrophenyl)-	58
2985	Butyrophenone, 4-nitro-3,4,4'-triphenyl-	-32
4181	Chalcone, 4-nitro-	-20
4308	-----, 4'-nitro-	40
	Lactones	
6819	2-Biphenylcarboxylic acid, 2'-hydroxy-5'(?)-nitro-, δ-lactone	78
3993	Hexanoic acid, 5-hydroxy-4,4-dimethyl-6-nitro-, δ-lactone	81
3940	Valeric acid, 5-hydroxy-4,4-dinitro-, δ-lactone	44
	Nitriles	
6013, 7077	Acetonitrile, p-nitrophenyl-	44, 88
7043	Benzonitrile, p-nitro-	(T)
5762	Malononitrile, m-nitrobenzylidene-	(T)
	Phenols	
3901	m-Cresol, 2,4,6-trinitro-	75
6059	Phenol, 2-cyclohexyl-4,6-dinitro-	99
2853, 4186	-----, 2,4-dinitro-6-phenyl-	100, 88
3900	-----, 4-isopropyl-2,6-dinitro-	83
4089	-----, p-(2-nitropropenyl)-	99
6244	Thymol, 2,6-dinitro-	93
3899	3,5-Xylenol, 2,4-dinitro-	67
6400	-----, 4-nitro-	83
	Phosphorus Compounds	
2997	Phosphonothioic acid, phenyl-, ethyl(o-nitrophenyl) ester	100
2998	ethyl(p-nitrophenyl) ester	100
2893	Thiophosphoric acid, O,O',O''-tris(p-nitrophenyl) ester	-39

TABLE I

Code No.	Classification and Name	K Value
	NITRO COMPOUNDS	
	Monosubstituted	
	Sulfides	
3040	Disulfide, bis(o-nitrophenyl)	27
4046	Sulfide, bis[(2-nitro-1-phenyl)ethyl]	28
4038	-----, bis[(2-nitro-1-phenyl)propyl]	99
	Miscellaneous	
3898	Benzaldehyde, p-nitro-, thiosemicarbazone	76
4146	Carbamic acid, 3,3-dinitro-1,5-pentamethylenebis[thio-, diphenyl ester	-15
5180	Carbonic acid, allyl 4,6-dinitro-o-tolyl ester	98
5766	Naphthostyril, 5-nitro-	99
	Pyridinium compounds.	
3799	1-(2,4-dinitrophenyl)----- chloride	87
4316	β-Styrenesulfonyl chloride, p-nitro-	46
3682	Thiocyanic acid, 2,4-dinitrophenyl ester	68
	Disubstituted	
	Acid-Amides	
2759	L-Glutamic acid, N-(m-nitrobenzoyl)-	41
5531*	Phthalanilic acid, 2'-nitro-	95
5532	-----, 4'-nitro-	55
	Alcohol-Halides	
4470	Benzyl alcohol, 3,4-dichloro-α-1-nitroethyl-	87
7261	2-Butanol, 1,1,1-trichloro-3-nitro-	19
7142*, 7143	2-Propanol, 1,1,1-trichloro-3-nitro-	88, 97
	Amide-Ethers	
4762, 4996	p-Anisanilide, 2'-nitro-	92, 89
4998	-----, 4'-nitro-	64
5972	Phthalamide, N,N'-bis(p-methoxyphenyl)-3-nitro-	44
	Amide-Halides	
4771	Benzanilide, 2-chloro-3'-nitro-	49
4772	-----, 2-chloro-4'-nitro-	46
4415	-----, 3'-chloro-3-nitro-	56
4446	-----, 4-chloro-2'-nitro-	64
4435	-----, 4-chloro-3'-nitro-	42
4747	-----, 4-chloro-4'-nitro-	56
4680	-----, 4'-chloro-4-nitro-	45
4431	-----, 2,4-dichloro-2'-nitro-	53
4904	-----, 2,4-dichloro-3'-nitro-	23
5769	Formanilide, 2'-chloro-4'-nitro-	96

TABLE I

Code No.	Classification and Name	K Value
	NITRO COMPOUNDS	
	Disubstituted	
	Amide-Heterocyclic Compounds	
2798	2-Furamide, 5-nitro-	95
4397	Morpholine, 4-(m-nitrobenzoyl)-	96
5132	Thiazole, 2-acetamido-4-methyl-5-nitro-	96
	Amine-Ethers	
3885	p-Anisidine, 2,6-dinitro-	74
4369	o-Anisidine, N-(2,4-dinitrophenyl)-	72
4669	Dibenzylamine, N-[2-(2,4-dinitrophenoxy)ethyl]-	84
5279	p-Phenetidine, 2-nitro-	81
	Amine-Halides	
4139	Aniline, 2-chloro-4-nitro-	86
4140	-----, 4-chloro-2-nitro-	88
3449	m-Toluidine, 2,6-diiodo-4-nitro-	60
	Ester-Halides	
4903	Benzoic acid, 2,4-dichloro-, o-nitrophenyl ester	18
4460	-----, p-nitro-, p-chlorophenyl ester	23
4878	Phenol, 2,3,5,6-tetrachloro-4-nitro-, acetate	87
	Ester-Heterocyclic Compounds	
4007, 5787	2-Furanmethanediol, 5-nitro-, diacetate	57, 72
5804	dipropionate	86
4006, 5790	Furfuryl alcohol, 5-nitro-, acetate	85, 86
4662	-----, tetrahydro-, p-nitrobenzoate	89
4967	2-Furoic acid, 5-nitro-, ethyl ester	100
5792, 6828	methyl ester	92, 97
5785, 6829	propyl ester	94, 99
4664	2-Pyridineethanol, m-nitrobenzoate	80
	Ether-Halides	
4877	Anisole, 2,3,5,6-tetrachloro-4-nitro-	83
4561	Ether, p-bromophenyl 2,4-dinitrophenyl	17
4786	-----, 4-tert-butyl-2-chlorophenyl 2,4-dinitrophenyl	23
4560	-----, p-chlorophenyl 2,4-dinitrophenyl	45
	Ether-Heterocyclic Compounds	
6384	Benzothiazole, 2-butoxy-6-nitro-	89
5320	Ether, methyl 5-nitrofurfuryl	84
4979	-----, tetrahydrofurfuryl 2,4-dinitrophenyl	98
4420	Furan, 2-(2,4-dinitrophenoxymethyl)tetrahydro-	100
2736	-----, 2-methoxymethyl-5-nitro-	95

TABLE I

Code No.	Classification and Name	K Value
	NITRO COMPOUNDS	
	Disubstituted	
	Ether-Phenols	
4088	1-Butene, 1-(4-hydroxy-3-methoxyphenyl)-2-nitro-	93
4897	Isoeugenol, β-nitro-	83
7148*	Styrene, 4-hydroxy-3-methoxy-β-nitro-	88
	Ether-Thiocyanates	
5666	Phenetole, 4-(1-methylheptyl)-x-nitro-β-(2-thiocyanato-ethoxy)-	80
5665	-----, 2-nitro-4-tert-pentyl-β-thiocyanato-	98
	Halide-Heterocyclic Compounds	
4372	1,3-Benzodioxan, 2,4-bis(trichloromethyl)-6-nitro-	63
3236	Carbazole, 3,6-dichloro-1,8-dinitro-	81
4082*	Furan, 2-(2-bromo-2-nitrovinyl)-	100
4968	-----, 2-chloro-5-nitro-	94
7151	-----, 5-chloro-2-(2-nitrovinyl)-	100
3983	Pyridine, 2-chloro-5-nitro-	76
	Halide-Hydrazides	
4956	Benzoic acid, p-nitro-, o-chlorobenzylidenehydrazide	55
4959	2,2,2-trichloroethylidenehydrazide	65
	Halide-Imides	
6047	Phthalimide, N-(2-bromoethyl)-3-nitro-	87
6053	-----, N-(2-bromoethyl)-4-nitro-	82
6057	-----, N-(o-chlorobenzyl)-4-nitro-	100
6058	-----, N-(p-chlorobenzyl)-4-nitro-	87
	Halide-Phenols	
4489	Phenol, 2-bromo-4-tert-butyl-6-nitro-	86
3390	-----, 2-chloro-4,6-dinitro-	100
4777	-----, 2,2'-(2,2,2-trichloroethylidene)bis[4-chloro-6-nitro-	91
	Heterocyclic-Hydrazides	
6701	Allophanic acid, 5-nitrofurfurylidenehydrazide	49
4763, 4951	Benzoic acid, p-nitro-, piperonylidenehydrazide	74, 0
	Heterocyclic-Ketones	
5802	3-Buten-2-one, 4-(5-nitro-2-furyl)-	94
5310, 5800	1-Propanone, 1-(5-nitro-2-furyl)-	100, 98
6481	Propiophenone, 2,3-dimorpholino-3-(m-nitrophenyl)-	14

TABLE I

Code No.	Classification and Name	K Value
	NITRO COMPOUNDS	
	Disubstituted	
	Heterocyclic-Semicarbazones	
2796	2-Furaldehyde, 5-nitro-, semicarbazone	37
2799	semioxamazone	85
6696	Ketone, methyl 5-nitro-2-furyl, semicarbazone	97
	Miscellaneous	
4986, 5126	Benzamide, N-(2-hydroxyethyl)-p-nitro-	77, 92
3232	1,3-Benzodioxan-4-one, 2-(m-nitrophenyl)-	81
3413	Benzoic acid, 2-hydroxymercuri-3-nitro-, γ-lactone	98
4952	-----, p-nitro-, (1-methyl-3-oxobutylidene)hydrazide	70
4002	-----, 4-nitro-2-sulfo-, potassium(sulfonate) salt	16
3475	Carbazole, 3-nitro-9-nitroso-	41
7219	Disulfide, bis(5-nitroquinol-8-yl)	11
4895	Ethanol, 2-(2,4-dinitroanilino)-	84
5561	-----, 2,2'-dithio-, bis(p-nitrobenzoate)	27
4478	-----, 2-[2-nitro-4-(tert-pentyl)phenoxy]-	88
6744	Fumaramic acid, N-carbamoyl-, 2-nitrobutyl ester	57
5313, 5788	2-Furaldehyde, 5-nitro-	96, 95
5799	anti-oxime	89
5311, 5789	2-Furfuryl alcohol, 5-nitro-	92, 94
5784	2-Furoic acid, 5-nitro-	84
5815	2-Furoyl chloride, 5-nitro-	86
3614	Isatin, 5,7-dinitro-	96
2797	Ketone, methyl 5-nitro-2-furyl	100
6711	Octadecanophenone, 2'-chloro-, 2,4-dinitrophenyl-hydrazone	-11
6046	1,4-Phthalazinedione, 2,3-dihydro-5-(p-nitrobenzamido)-	-2
6043	2-Propanol, 1,1,1-trichloro-3-nitro-, carbanilate	88
6014	Pyruvic acid, (o-nitrophenyl)-	51
3351	-----, (p-nitrophenyl)-, methyl ester	1
3478	8-Quinolinol, 5,7-dinitro-	81
6470	Salicylamide, N-butyl-3-cyclohexyl-5-nitro-	51
7272	Salicylic acid, 5-nitro-, ethyl ester	44
5951	Sulfide, 2-chlorocyclohexyl 2,4-dinitrophenyl	36
3272	Sulfoxide, 2-chloroethyl 2,4-dinitrophenyl	93
2996	α-Toluenephosphonic acid, α-hydroxy-m-nitro-, diethyl ester	81
	Polysubstituted	
3975	Benzaldehyde, p-hydroxy-, (6-nitro-2-benzothiazolyl)-hydrazone	-52
3452	Benzoic acid, 6-benzoyl-3-chloro-2-nitro-	84
4932	Ethanol, 2-(2-chloro-3,5-dinitrobenzenesulfonamido)-	93

TABLE I

Code No.	Classification and Name	K Value
	NITRO COMPOUNDS	
	Polysubstituted	
5301	Furfuryl alcohol, 5-nitro-, bromoacetate	89
2754	chloroacetate	70
5300	p-chlorobenzoate	30
5302	x-chloropropionate	78
3721	Quinoline, 5-bromo-6-methoxy-8-nitro-	-7
6727	Salicylanilide, 5-chloro-2'-nitro-	95
6728	-----, 5-chloro-3'-nitro-	97
6729	-----, 5-chloro-4'-nitro-	99
	NITROSO COMPOUNDS	
4667	Aniline, N,N-dimethyl-p-nitroso-	99
3017	Benzylamine, N-cyclohexyl-N-nitroso-	83
3475	Carbazole, 3-nitro-9-nitroso-	41
3476	-----, 9-nitroso-, crude	74
3876	m-Cresol, 4-nitroso-	72
7278	Diphenylamine, 4-nitroso-	54
7109	Octanamide, N,N'-ethylenebis[N-nitroso-	36
6767	2H-1,2-Oxazine, 3,6-dihydro-4(or 5)-methyl-2-nitroso-	97
6790*	Piperazine, 2,5-dimethyl-1,4-dinitroso-	100
4402	-----, 1,4-dinitroso-	100
6084	5(4H)-Pyrazolone, 4-isonitroso-3-methyl-1-phenyl-	60
3133, 7221	4-Pyrimidinol, 2,6-diamino-5-nitroso-	-9, -48
3891	2,6-Xylenol, 4-nitroso-	76
	PHENOLS	
	Unsubstituted	
4265	4,4'-Biphenol, 2,2'-diallyl-	94
4655	m(and p)-Cresol, x,x'-(4,6-dimethyl-1,3-xylylene)bis-[x-(2,4-dimethylbenzyl)-	-3
4652	-----, x,x'-(4,6-dimethyl-1,3-xylylene)di-	82
3568	o-Cresol, 4,4'-isopropylidenedi-	64
7093	p-Cresol, 2,2'-methylenebis[6-nonyl(?)-	44
4651	x-Cresol, α,α'-(x,x-dimethyl-x-phenylene)di-	96
4565	1-Naphthol, compound with 1 f. wt. 1,3,5-trinitrobenzene	100
3375	2-Naphthol, cis-decahydro-	54
4648	-----, compound with 1 f. wt. 1,3,5-trinitrobenzene	99
4539	Phenol, o-butyl-	90
4538	-----, p-butyl-	91
3168	-----, 4-tert-butyl-2-(α-methylbenzyl)-	84
3567	-----, 4-tert-butyl-2-phenyl-	86

TABLE I

Code No.	Classification and Name	K Value
	PHENOLS	
	Unsubstituted	
4198	Phenol, o-cyclohexyl-	100
4192	-----, p-cyclohexyl-	76
4864	-----, o-cyclopentyl-	90
4865	-----, p-cyclopentyl-	84
2838, 3167	-----, p-(α,α-dimethylbenzyl)-	85, 67
3169	-----, x-(α-methylbenzyl)-, mixture	91
3166	-----, x-(α-methylbenzyl)-2-phenyl-	91
2840	-----, 4,4'-(1-methylpropylidene)di-	87
6277	-----, x-(10-methylundecyl)-	85
3570	-----, p-nitro-, mixture of nonyl isomers	64
5222	Pyrocatechol, 4,4'-(2,3-dimethyltetramethylene)di-	62
2827	-----, 4-phenyl-	67
4653	2,4-Xylenol, $\alpha^2,\alpha^{2'}$-(4,6-dimethyl-m-phenylene)bis-[6-tert-butyl-	94
4654	2,6-Xylenol, $\alpha^2,\alpha^{2'}$-(4,6-dimethyl-m-phenylene)bis-[4-tert-butyl-	44
4656	-----, $\alpha^2,\alpha^{2'}$-(4,6-dimethyl-m-phenylene)bis[4-isopropyl-α^6-(2,4-xylyl)-	-82
	Monosubstituted	
	Acids	
3423	2-Anthroic acid, 3-hydroxy-	47
6367	Benzoic acid, x,x,x-trihydroxy-	46
4461	2,3-Cresotic acid, 5,5'-methylenedi-	93
3287	Gentisic acid, magnesium salt	21
6369	Isophthalic acid, 2,4,5-trihydroxy-	67
3245	Phthalic acid, 3-hydroxy-	9
3067	Salicylic acid, nickel(II) salt	65
5351	silver salt	67
2835	-----, 3-phenyl-	81
2836	-----, 5-phenyl-	87
6772	Succinic acid, 4-hydroxybenzyl-	28
	Alcohols	
6818	2-Biphenylmethanol, 2'-hydroxy-α,α-dimethyl-	79
4650	Phenol, p-(3-hydroxy-3-methylbutyl)-	93
	Amides	
7059	Acetamide, 2-salicylidene-	0
6011	Acetanilide, 4'-hydroxy-	7
2914	2-Anthranilide, 3-hydroxy-	11
4425	1-Naphthalenepropionamide, N-cyclohexyl-2-hydroxy-	35
4937	3-Naphthamide, N-cyclohexyl-2-hydroxy-	81

TABLE I

Code No.	Classification and Name	K Value
	PHENOLS	
	Monosubstituted	
	Amides	
7052	Salicylamide	86
4465	copper(II) derivative	96
6490	-----, N-butyl-3-cyclohexyl-	50
7180	-----, N-cyclohexyl-	95
7182	-----, N-1-naphthyl-	41
5946	-----, 3-phenyl-	71
3388	Salicylanilide	50
3355	Salicylo-o-toluidide	52
	Amines	
4239	9,10-Anthradiol,1,4-diamino-	0
6659	o-Cresol, 4,6-bis(1-methylheptyl)-α-(dimethylamino)-	84
6656	-----, 4-tert-butyl-6-cyclohexyl-α-(dimethylamino)-	98
6661	-----, α-(dimethylamino)-x-dodecyl-	94
6660	-----, α-(dimethylamino)-4-(1-methylheptyl)-	100
6625	-----, α-(dimethylamino)-4-(1,1,3,3-tetramethylbutyl)-	79
6621	Phenol, 2-amino-4-arsenoso-, hydrochloride	95
3994	-----, 4-anilino-2-tert-butyl-	76
6223	-----, p-(benzylamino)-	40
4814	-----, 2-tert-butyl-4-(butylamino)-	80
4346	-----, 2-tert-butyl-4-isopropyl-6-[(dimethylamino)methyl]-	89
3262	-----, 2,4,6-triamino-, trihydrochloride	95
5412	Resorcinol, 5-amino-	63
4043	Salicylamine, N-phenyl-	45
6657	2,6-Xylenol, α^2-(diethylamino)-4-(1,1,3,3-tetramethylbutyl)-	97
6664	-----, α^2-(dimethylamino)-4-(1-methylheptyl)-	97
	Halides	
3526	x,x-Biphenol, octachloro-	94
7146*	Catechol, tetrachloro-	96
3605	p-Cresol, 2,6-dibromo-	80
3619	o-Cresol, 4,6-diiodo-	34
3571, 7277*	Hydroquinone, tetrachloro-	80, 83
4132	2-Naphthol, 1,6-dibromo-	91
5196	x_n-Phenanthrenepolyol, x_n-polychloro-	29
4193	Phenol, 2-bromo-4-phenyl-	79
4870	-----, 2(and 4)-2-butenyl-4(and 2)-6-dichloro-	80
4543	-----, x-butyl-x,x,x,x-tetrachloro-	97
4262	-----, 2-chloro-4-cyclohexyl-	84
4263	-----, 4-chloro-2-cyclohexyl-	97

TABLE I

Code No.	Classification and Name	K Value
	PHENOLS	
	Monosubstituted	
	Halides	
3165	Phenol, 4-chloro-2-(α-methylbenzyl)-	91
2938	-----, 4-chloro-2-phenyl-	98
2937	-----, x-chloro-2-phenyl-	99
2936	-----, x-chloro-4-phenyl-	85
4661	-----, 4,4'-cyclohexylidenebis[2,6-dichloro-	83
2977	-----, 2,4-dichloro-	76
2939	-----, 2,4-dichloro-6-phenyl-	86
4145	-----, 4,4'-isopropylidenebis[2-chloro-	87
7092	-----, 4,4'-isopropylidenebis[2,6-dichloro-	32
3055	-----, 2,2'-methylenebis[4,6-dichloro-	86
4381	-----, 3,3'-methylenebis[2,4,6-trichloro-	51
3385, 4206	-----, pentabromo-	88, 95
4509	-----, pentachloro-, diamminecopper(II) derivative	66
4510	rosinamminecopper(II) derivative	87
3500	zinc derivative	91
4869	-----, 2,3,5,6-tetrachloro-	94
4212	-----, 2,4,6-tribromo-	58
4657	-----, 2,2'-(2,2,2-trichloroethylidene)bis[6-bromo-4-chloro-	90
4382	-----, 2,2'-(2,2,2-trichloroethylidene)bis[4,6-dichloro-	98
6471	Pyrocatechol, 4-chloro-	79
3882	Thymol, 6-chloro-	76
3407	3,5-Xylenol, 4-bromo-	74
6392	2,6-Xylenol, 4-chloro-	61
6395	3,5-Xylenol, 2,2'-methylenebis[4,6-dichloro-	25
	Heterocyclic Compounds	
4399	o-Cresol, α-morpholino-	73
7268	Mesitol, α^2-(2-pipecolino)-, hydrochloride	95
5239	2-Naphthol, 1-(piperidinomethyl)-	99
5118	Phenol, p-(1,5-diphenyl-2-pyrazolin-3-yl)-	57
7267	2,4-Xylenol, α^2-(2-pipecolino)-, hydrochloride	91
	Imides	
5394	Bicyclo[2.2.1]hept-5-ene-2,3-dicarboximide, N-(p-hydroxyphenyl)-	81
5529	Phthalimide, N-(o-hydroxyphenyl)-	44
	Imines	
6775	2,2'-Binaphthalene-1,1',6,6',7,7'-hexol, 8,8'-bis(hexylimino)methyl-5,5'-diisopropyl-3,3'-dimethyl-	-11

TABLE I

Code No.	Classification and Name	K Value
	PHENOLS	
	Monosubstituted	
	Imines	
4982	o-Cresol, α-(o-hydroxyphenylimino)-	81
2983	-----, α-phenylimino-	88
4424, 4981	Phenol, o-benzylideneamino-	75, 83
	Ketones	
3434	Acetophenone, 2',5'-dihydroxy-	19
2975	-----, m-hydroxy-	76
3276	-----, p-hydroxy-	41
4342	-----, 2',4',5'-trihydroxy-	48
3565	Benzophenone, 2,4'-dihydroxy-	52
3566	-----, 4,4'-dihydroxy-	60
2828	-----, 4-hydroxy-	48
6002	3-Buten-2-one, 4-(o-hydroxyphenyl)-	34
3916	Chalcone, 2,2'-dihydroxy-	42
6031	9-Fluorenone, 2-hydroxy-	55
3564	Propiophenone, p-hydroxy-	42
3905	Salicil	19
	Nitriles	
7075	Malononitrile, p-hydroxybenzylidene-	96
4423	1-Naphthalenepropionitrile, 2-hydroxy-	58
	Nitro Compounds	
3901	m-Cresol, 2,4,6-trinitro-	75
6059	Phenol, 2-cyclohexyl-4,6-dinitro-	99
2853, 4186	-----, 2,4-dinitro-6-phenyl-	100, 88
3900	-----, 4-isopropyl-2,6-dinitro-	83
4089	-----, p-(2-nitropropenyl)-	99
6244	Thymol, 2,6-dinitro-	93
3899	3,5-Xylenol, 2,4-dinitro-	67
6400	-----, 4-nitro-	83
	Nitroso Compounds	
3876	m-Cresol, 4-nitroso-	72
3891	2,6-Xylenol, 4-nitroso-	76
	Quinones	
5271	p-Benzoquinone, 2,5-dihydroxy-	84
2900	Quinizarin	35
	Thiocyanates	
4062	Thiocyanic acid, 5-tert-butyl-4-hydroxy-m-tolyl ester	99
4056	3-ethyl-4-hydroxyphenyl ester	100

TABLE I

Code No.	Classification and Name	K Value
	PHENOLS	
	Monosubstituted	
	Thiocyanates	
4061	Thiocyanic acid, 5-hydroxycarvacryl ester	91
4060	4-hydroxy-m-cumenyl ester	100
4050	p-hydroxyphenyl ester	100
4055	4-hydroxy-m-tolyl ester	100
4057	4-hydroxy-2,6-xylyl ester	93
4058	4-hydroxy-3,5-xylyl ester	100
	Miscellaneous	
3705	Benzaldehyde, p-hydroxy-, thiosemicarbazone	21
3139	Benzenesulfonanilide, 2,5-dihydroxy-	46
3353	Carbanilic acid, p-hydroxy-, isopropyl ester	67
6393	m(or o)-Cumenesulfonic acid, 6(or 5)-tert-butyl-5(4 or 6)-hydroxy-, sodium salt	55
6295	Gentisic acid, x-tert-butyl-, propyl ester	84
5221	Phenol, 2,6-dimethoxy-4-propenyl-	92
4000	-----, p-phenylazo-	96
2908	-----, 2,2'-thiobis[4-tert-butyl-	79
5275	Phthalide, 3,3-bis(2,4,6-trihydroxy-m-tolyl)-	51
7044	Salicylaldehyde, oxime	99
5757	Urea, 1-(p-hydroxyphenyl)-1-methyl-3-phenyl-	38
	Disubstituted	
	Acid-Halides	
4191, 4322	Salicylic acid, 5-bromo-	93, 90
4463	-----, 5-chloro-	100
4462	-----, 3,5-dichloro-	98
	Alcohol-Amines	
6662	Ethanol, 2-(5-tert-butyl-2-hydroxybenzylamino)-	98
6655	-----, 2,2'-(5-tert-butyl-2-hydroxybenzylamino)bis-	98
6702	-----, 2,2'-(5-tert-butyl-2-hydroxy-3-phenylbenzylamino)bis-	99
6654	-----, 2-[5-(1,1-dimethylpropyl)-2-hydroxybenzylamino]-	97
6018	-----, 2,2'-(p-hydroxyanilino)bis-	44
5330	-----, 2-(o-hydroxybenzylamino)-	34
6649	-----, 2-(2-hydroxy-3-phenylbenzylamino)-	83
	Alcohol-Halides	
7100, 7291*	2,2'-Methylenebis(4-chloro-6-hydroxymethylphenol)	66, 75
6248	Saligenin, 5-chloro-	90

TABLE I

Code No.	Classification and Name	K Value
	PHENOLS	
	Disubstituted	
	Amide-Ethers	
5943	m-Anisamide, 6-hydroxy-N-methyl-	27
6253	Salicylo-p-phenetidide	25
	Amide-Halides	
6501	Salicylamide, N-allyl-5-chloro-	99
6720	-----, N-benzyl-5-chloro-	83
6484	-----, 5-bromo-N,N-dimethyl-3-phenyl-	5
6506	-----, N-butyl-5-chloro-	99
6508	-----, N-sec-butyl-5-chloro-	98
6535, 6714	-----, N-tert-butyl-5-chloro-	99, 95
6534, 6713	-----, 5-chloro-	97, 95
6505	-----, 5-chloro-N-ethyl-	91
6717	-----, 5-chloro-N-heptyl-	96
6716	-----, 5-chloro-N-hexyl-	94
6503	-----, 5-chloro-N-isobutyl-	99
6502	-----, 5-chloro-N-isopropyl-	98
6500	-----, 5-chloro-N-methyl-	97
6718	-----, 5-chloro-N-octyl-	90
6715	-----, 5-chloro-N-pentyl-	93
6509	-----, 5-chloro-N-propyl-	98
6722	Salicylanilide, 5-chloro-	73
6780	-----, 4',5-dibromo-	75
6723	-----, 2',5-dichloro-	82
6724	-----, 3',5-dichloro-	92
6725	-----, 4',5-dichloro-	88
6726	-----, 2',5,5'-trichloro-	88
6731	Salicylo-m-toluidide, 5-chloro-	79
6730	Salicylo-o-toluidide, 5-chloro-	89
6732	Salicylo-p-toluidide, 5-chloro-	72
	Amine-Ketones	
6308	Acetophenone, 3',4'-dihydroxy-2-[(3-phenylpropyl)amino]-, hydrochloride	63
6087	3-Buten-2-one, 4-(p-hydroxy-N-methylanilino)-	37
	Amine-Nitriles	
4724	Propionitrile, 3,3'-[(2-hydroxynaphth-1-ylmethyl)imino]bis-	58
4481	-----, 3,3'-(5-phenylsalicylimino)bis-	74
	Carbamate-Quinones	
5324	1-Anthraquinonecarbamic acid, 4-hydroxy-, methyl ester	-42
5344	pentyl ester	0

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Code No.	Classification and Name	K Value
	PHENOIS	
	Disubstituted	
	Ester-Ethers	
5903	Ferulic acid, ethyl ester	29
5902	methyl ester	30
	Ether-Imines	
2984	o-Cresol, α-(p-ethoxyphenylimino)-	24
4984	Phenol, o-[(p-methoxybenzylidene)amino]-	72
	Ether-Nitro Compounds	
4088	1-Butene, 1-(4-hydroxy-3-methoxyphenyl)-2-nitro-	93
4897	Isoeugenol, β-nitro-	83
7148*	Styrene, 4-hydroxy-3-methoxy-β-nitro-	88
	Halide-Imines	
4983	Phenol, o-[(o-chlorobenzylidene)amino]-	67
4985	-----, o-[(p-chlorobenzylidene)amino]-	71
	Halide-Nitro Compounds	
4489	Phenol, 2-bromo-4-tert-butyl-6-nitro-	86
3390	-----, 2-chloro-4,6-dinitro-	100
4777	-----, 2,2'-(2,2,2-trichloroethylidene)bis[4-chloro-6-nitro-	91
	Halide-Sulfides	
4690	Phenol, 2,2'-thiobis[4-chloro-	95
5434	salt with 1 f. wt. dimethylamine	76
	Miscellaneous	
4236	2-Anthraquinonesulfonic acid, 1,4-dihydroxy-, manganese(II) salt	68
6699	Benzoic acid, 3,5-bis[(dimethylamino)methyl]-4-hydroxy-, methyl ester	60
4320	-----, o-(p-hydroxybenzoyl)-	2
4863	d-Catechol	31
6673	o-Cresol, 6-bromo-4-tert-butyl-α-(dimethylamino)-	96
4427	-----, 4-chloro-α-morpholino-	60
4379	-----, 3,4,6-trichloro-α-(2,3,5-trichloro-6-methoxyphenyl)-	42
4488	2,5-Cresotic acid, α-thiocyanato-	31
2978	2-Naphthoic acid, 3-hydroxy-7-sulfo-	67
4889	Phenol, p-(2,4-dinitroanilino)-	9
6293	1-Propanol, 3-(4-hydroxy-3-methoxyphenyl)-	35
5534	γ-Resorcylic acid, 4-amino-, hydrogensulfate	64

TABLE I

Code No.	Classification and Name	K Value
	PHENOLS	
	Disubstituted	
	Miscellaneous	
5555	Rhodanine, 5-vanillylidene-	67
4260	Salicylaldehyde, 3,5-dichloro-	96
4261	oxime	94
6470	Salicylamide, N-butyl-3-cyclohexyl-5-nitro-	51
7272	Salicylic acid, 5-nitro-, ethyl ester	44
3743	-----, 2-thenyl ester	59
2979	α-Toluenephosphonic acid, p,α-dihydroxy-	40
	Polysubstituted	
3975	Benzaldehyde, p-hydroxy-, (6-nitro-2-benzothiazolyl)-hydrazone	-52
5432	o-Cresol, 6,6'-thiobis[4-chloro-α-(dimethylamino)-	97
6674	Ethanol, 2-(3-bromo-5-tert-butyl-2-hydroxybenzylamino)-	98
6675	-----, 2-(5-tert-butyl-3-chloro-2-hydroxybenzylamino)-	100
4469	-----, 2,2,2-trichloro-1-salicylamido-	80
4866	Flavanone, d-3,3,4,5,7-pentahydroxy-	28
4120	2,7-Naphthalenedisulfonic acid, 3-(p-aminophenylazo)-4,5-dihydroxy-, disodium salt	23
2800	2-Naphthamide, 1,2,3,4-tetrahydro-6-hydroxy-4-(4-hydroxy-3-methoxyphenyl)-3-hydroxymethyl-7-methoxy-, from α-conidendrin	18
5389	Naringenin	34
5233	Propiophenone, 3-chloro-4'-hydroxy-3'-methoxy-	77
6309	Protocatechuyl alcohol, α-[1-(p-methoxyphenyl)-2-propylaminomethyl]-, hydrochloride	89
5908	Pyruvic acid, (4-hydroxy-3-methoxyphenyl)-, oxime	27
5528	-----, (4-hydroxy-3-methoxyphenyl)-2-thio-	71
6719	Salicylamide, 5-chloro-N-(2-hydroxyethyl)-	84
6721	-----, 5-chloro-N-(3-hydroxypropyl)-	94
6727	Salicylanilide, 5-chloro-2'-nitro-	95
6728	-----, 5-chloro-3'-nitro-	97
6729	-----, 5-chloro-4'-nitro-	99
6472	Salicylic acid, 5-bromo-3-phenyl-, 2-(diisopropylamino)-ethyl ester, hydrochloride	71
6487	-----, 5-iodo-3-phenyl-, 2-(diisopropylamino)ethyl ester, hydrochloride	65
	PHOSPHORUS COMPOUNDS	
	Phosphates, ortho-	
6972	Isooctyl phosphate, dibutyltin	60

TABLE I

Code No.	Classification and Name	K Value
	PHOSPHORUS COMPOUNDS	
	Phosphates, ortho-	
3108	Phosphoric acid, bis(5-tert-butyl-2-biphenylyl) p-tert-butylphenyl ester	11
3090	bis(o-chlorophenyl) phenyl ester	93
5236	bis(3,5,5-trimethylhexyl) ester	90
3091	o-chlorophenyl diphenyl ester	92
2880	2-(2,4-dichlorophenoxy)ethyl diethyl ester	78
2885	diethyl 2-(1-naphthyl)ethyl ester	83
2883	diethyl 1-naphthylmethyl ester	74
2852	tris(2-biphenylyl) ester	45
3092	tris(p-tert-butylphenyl) ester	50
4187	tris(o-chlorophenyl) ester	91
4110	tris(2,3-dibromopropyl) ester	95
3946	tris(pentachlorophenyl) ester	100
	Phosphites	
5677	Orthophosphorous acid, bis[2-(2-thiocyanatoethoxy)-ethyl] ester	82
7297	Phosphorous acid, aryl dialkyl esters	15
2878	2,4-dichlorobenzyl diethyl ester	85
2884	diethyl 2-(1-naphthyl)ethyl ester	80
	Phosphonates	
5084	Phosphonic acid, 2-cyanoethyl-, dihexyl ester	98
5083	dimethyl ester	26
6385	-----, diimide, N,N'-bis(5-chloro-2-pyrimidinyl)-P-phenyl-	43
2876, 3875	-----, ethylenedi-, tetraethyl ester	97, 87
5235	-----, 9-fluorenyl-, dimethyl ester	55
2877	-----, 1-naphthylmethyl-	68
2881	diethyl ester	80
5678	-----, (2,2,3-trichloro-1-hydroxybutyl)-, bis[2-(2-thiocyanatoethoxy)ethyl] ester	84
5679	-----, (2,2,2-trichloro-1-hydroxyethyl)-, bis[2-(2-thiocyanatoethoxy)ethyl] ester	84
4464	α-Toluenephosphonic acid, o-chloro-α-hydroxy-, diethyl ester	85
4885	-----, 2,4-dichloro-	78
4887	diethyl ester	67
4886	-----, 3,4-dichloro-	74
2879	diethyl ester	74
2980	-----, 2,4-dichloro-α-hydroxy-, diethyl ester	86
2979	-----, p,α-dihydroxy-	40
2996	-----, α-hydroxy-m-nitro-, diethyl ester	81

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Code No.	Classification and Name	K Value
	PHOSPHORUS COMPOUNDS	
	Phosphonium Compounds	
	Phosphonium compounds.	
3699	butyltriphenyl----- iodide	95
3701	dodecyltriphenyl----- bromide, 50 percent in alcohol	96
3698	ethyltriphenyl----- iodide	92
3700	hexyltriphenyl----- bromide	90
3697	methyltriphenyl----- iodide	85
5387	tetrakis(hydroxymethyl)----- chloride	83
3548	tetraphenyl----- bromide	70
3558	tetraphenyl----- iodide	100
3138	triphenyl(triphenylmethyl)----- chloride	100
	Thiophosphates	
6377*	Phosphorotetrathioic acid, trimethyl ester	87
7301	Phosphorotrithioic acid, O,S,S'-trimethyl ester	99
3878	Thiophosphoric acid, O,O'-bis(p-tert-pentylphenyl) ester	86
2882	-----, O,O'-diethyl O"-1-naphthylmethyl ester	(T)
2893	-----, O,O',O"-tris(p-nitrophenyl) ester	-39
	Miscellaneous	
6569*	Phosphine oxide, tris(1-aziridinyl)-	100
3760	-----, tris(o-chlorophenyl)-	-10
6450*	Phosphine sulfide, tris(1-aziridinyl)-	93
3877	-----, trithiobis[di-m-tolyloxy-	92
2997	Phosphonothioic acid, phenyl-, ethyl(o-nitrophenyl) ester	100
2998	ethyl(p-nitrophenyl) ester	100
5289	Phosphorohydrazidic acid, 2-phenyl-, diethyl ester	74
7184	Phosphorothioic triamide, N,N',N"-tricyclohexyl-	40
7042	-----, triamide, N,N',N"-tridodecyl-	30
3704	Pyrophosphoramide, octamethyl-	(T)
	QUATERNARY NITROGEN COMPOUNDS	
	Ammonium Compounds	
	Ammonium compounds.	
4222	alkyltrimethyl----- chloride (alkyl=C_8H_{17}-$C_{18}H_{37}$)	84
4223	alkyltrimethyl----- chloride (alkyl=approx. $C_{12}H_{25}$)	90
4226	alkyltrimethyl----- chloride (alkyl=approx. $C_{18}H_{37}$)	91
4221	alkyltrimethyl----- p-dodecylbenzenesulfonate (alkyl=C_8H_{17}-$C_{18}H_{37}$)	89

TABLE I

Code No.	Classification and Name	K Value
	QUATERNARY NITROGEN COMPOUNDS	
	Ammonium Compounds	
	Ammonium compounds.	
4224	alkyltrimethyl----- p-dodecylbenzenesulfonate (alkyl=approx. $C_{12}H_{25}$)	93
4225	alkyltrimethyl----- p-dodecylbenzenesulfonate (alkyl=approx. $C_{18}H_{37}$)	95
3456	alkyltrimethyl----- p-(1-methylbutyl)benzenesulfonate (alkyl=approx. $C_{12}H_{25}$)	95
3457	alkyltrimethyl----- p-(1-methylbutyl)benzenesulfonate (alkyl=approx. $C_{18}H_{37}$)	90
5892	allyl(x-dodecylbenzyl)diethyl----- hexafluorophosphate	97
4501	benzylbis(2-hydroxyethyl)dodecyl----- chloride	90
4503	benzylbis(2-hydroxyethyl)hexadecyl----- chloride	98
4502	benzylbis(2-hydroxyethyl)tetradecyl----- chloride	98
3357	benzyl(carboxymethyl)dimethyl----- chloride, tetradecyl ester	94
4483	benzyl(4,4-dibenzoyl-2,2-dimethylbutyl)dimethyl----- chloride	97
4482	benzyl(2,2-dimethyl-5-oxo-3-undecenyl)dimethyl----- chloride	91
3270	benzyldimethylphenyl----- chloride	75
4718	benzyldimethyl[2-[2-[p-(1,1,3,3-tetramethylbutyl)-phenoxy]ethoxy]ethyl]----- thiocyanate	98
4025	benzyldodecyldimethyl----- benzenesulfonate	96
6564	benzyldodecyldimethyl----- 1-dodecanesulfonate	89
6563	benzyldodecyldimethyl----- methanesulfonate	95
3872	benzyldodecyldimethyl----- x-toluenesulfonate	68
5357	benzylhexadecyldimethyl----- hexafluorophosphate	82
4334	benzyl(2-hydroxyethyl)methyl[2-[2-[x-(1,1,3,3-tetramethylbutyl)phenoxy]ethoxy]ethyl]----- chloride	97
3980	benzyltrimethyl----- p-toluenesulfonate	38
4506	bis(2-hydroxyethyl)(2,4-dichlorobenzyl)hexadecyl----- chloride	97
4507	bis(2-hydroxyethyl)(3,4-dichlorobenzyl)hexadecyl----- chloride	88
4504	bis(2-hydroxyethyl)(2,4-dichlorobenzyl)tetradecyl----- chloride	99
4505	bis(2-hydroxyethyl)(3,4-dichlorobenzyl)tetradecyl----- chloride	99
4743	[4-[(o-chlorophenyl)[p-dimethylamino)phenyl]methylene]-2,5-cyclohexadienylidene]dimethyl----- chloride	98
5420	decamethylenebis[(2-hydroxyethyl)dimethyl----- bromide	53
5423	decamethylenebis[bis(2-hydroxyethyl)methyl----- bromide	33

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Code No.	Classification and Name	K Value
	QUATERNARY NITROGEN COMPOUNDS	
	Ammonium Compounds	
	Ammonium compounds.	
5894*	di(x-dodecenyl)dimethyl----- chloride	93
5895*	di(x-dodecenyl)dimethyl----- chloride, aqueous	98
4348	dimethyl[(didodecyl) and (ditetradecyl)]----- chloride, 75 percent in isopropyl alcohol	89
4349	dimethyl[(dihexadecyl) and (dioctadecyl)]----- chloride, 75 percent in isopropyl alcohol	63
5896	(x-dodecylbenzyl)trimethyl----- chloride	81
5356	(x-dodecylbenzyl)trimethyl----- hexafluorophosphate	92
6552*	(p-dodecylphenyl)triethyl----- sulfate	99
3871	dodecyltrimethyl----- benzenesulfonate	96
4357	dodecyltrimethyl----- chloride	83
4352	dodecyltrimethyl----- chloride, 50 percent in isopropyl alcohol	97
3870	dodecyltrimethyl----- p-chlorobenzenesulfonate	93
3869	dodecyltrimethyl----- p-fluorobenzenesulfonate	89
3868	dodecyltrimethyl----- m-nitrobenzenesulfonate	82
3867	dodecyltrimethyl----- p-toluenesulfonate	87
6566	ethyldimethyl[2-[2-(p-octylphenoxy)ethoxy]ethyl]----- 1-dodecanesulfonate	82
6401*	ethylenebis[(aminocarbonylmethyl)dimethyl[x-(1-methylheptyl)benzyl]----- chloride	89
6545	hexadecyl(2-hydroxyethyl)methyl(2,3,4,5,6-pentahydroxyhexyl)----- bromide	84
5545	hexadecyl[2-[(p-methoxybenzyl)-2-pyrimidinyl-amino]ethyl]dimethyl----- bromide	82
4354	hexadecyltrimethyl----- chloride	92
5419	pentamethylenebis[(2-hydroxyethyl)dimethyl----- iodide, diacetate	53
3978	tetramethyl----- p-cyclohexylbenzenesulfonate	87
4350	trimethyl[(dodecyl) and (tetradecyl)]----- chloride	92
4351	trimethyl[(dodecyl) and (tetradecyl)]----- chloride, 50 percent mixture in isopropyl alcohol	95
4353	trimethyl[(hexadecyl) and (x-octadecenyl)]----- chloride	90
4347	trimethyl[(x,x-octadecadienyl) and (x-octadecenyl)]----- chloride	91
4355	trimethyl[(x,x-octadecadienyl) and (x-octadecenyl)]----- chloride, 50 percent mixture in isopropyl alcohol	94
3862	trimethyloctadecyl----- benzenesulfonate	86
4356	trimethyloctadecyl----- chloride, in isopropyl alcohol	91
3863	trimethyloctadecyl----- p-chlorobenzenesulfonate	82
3866	trimethyloctadecyl----- p-fluorobenzenesulfonate	88
3864	trimethyloctadecyl----- m-nitrobenzenesulfonate	85
3865	trimethyloctadecyl----- p-toluenesulfonate	95

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Code No.	Classification and Name	K Value
	QUATERNARY NITROGEN COMPOUNDS	
	Ammonium Compounds	
	Ammonium compounds.	
3512	trimethylphenyl----- methyl sulfate	73
4331	trimethyl[2-[2-[x-(1,1,3,3-tetramethylbutyl)-phenoxy]ethoxy]ethyl]----- bromide	89
4333	Glycine, [2-[2-[p-(1,1,3,3-tetramethylbutyl)phenoxy]-ethoxy]ethyl]betaine	60
5552	d-Thioneine	12
	Heterocyclic Compounds	
	Benzothiazolium compounds.	
5395	2,3-dimethyl----- methyl sulfate	92
	Imidazolium compounds.	
6998*	1(or 3)-benzyl-2-coco-1-(2-hydroxyethyl)-2-----chloride, 60 percent in isopropyl alcohol	92
7000*	1(or 3)-benzyl-x-heptadecen-2-yl-1-(2-hydroxyethyl)-2-----chloride, 60 percent in isopropyl alcohol	92
7138*	3-benzyl-1-methyl-2-undecyl----- bromide	99
7005	1(or 3)-4-chlorobutyl)-x-heptadecen-2-yl-1-(2-hydroxy-ethyl)-2------ chloride, 60 percent in isopropyl alcohol	97
	Isoquinolinium compounds.	
3416	2-dodecyl----- p-toluenesulfonate	95
	Lepidinium compounds.	
4020	1-isopentyl-α-[1-isopentyl-4(1H)-quinolylidene]-----iodide	-6
	Morpholinium compounds.	
6546	4-benzyl-4-[(2,5,8,11,14,17,20-heptamethyl-3,6,9,12,-15,18,21-heptoxo-23-hydroxy)tetracosyl]----- chloride	74
3949	4,4-bis(2-hydroxyethyl)----- chloride	-5
6544	4-(2-carboxyethyl)-4-x-octadecenyl----- betaine	5
6542	4-(2,3-epoxypropyl)-4-hexadecyl----- chloride	72
6568	4-ethyl-4-hexadecyl----- 1-dodecanesulfonate	76
6567*	4-ethyl-4-hexadecyl----- methanesulfonate	93
6565*	4-ethyl-4-hexadecyl----- p-toluenesulfonate	94
3981	4-methyl-4-pentyl----- benzenesulfonate	16
3950	4,4'-oxydiethylenebis[4-(2-hydroxyethyl)----- chloride	-77
	Nicotinium compounds.	
2776	bis(3,4-dichlorobenzyl)----- dichloride	75
2751	dibutyl----- dibromide	42
2804	didodecyl----- dipicrate	87
2807	diethylenebis-----dibromide	93
2741	dimethyl----- dibromide	7
2742	dimethyl----- diiodide	53
2784	dimethyl----- di-p-toluenesulfonate	52

TABLE I

Code No.	Classification and Name	K Value
	QUATERNARY NITROGEN COMPOUNDS	
	Heterocyclic Compounds	
	Picolinium compounds.	
3420	1-dodecyl-2------ p-toluenesulfonate	94
4251	1-methyl-2------ iodide	77
3419	1-dodecyl-3------ p-toluenesulfonate	80
3418	1-dodecyl-4------ p-toluenesulfonate	93
	Piperazinium compounds.	
6554	1,4-didodecyl-1,4-diethyl----- bis(ethyl sulfate)	96
6634	1,4-diethyl-1,4-dihexadecyl----- bis(ethyl sulfate)	48
	Piperidinium compounds.	
3356	1-carboxymethyl-1-methyl----- chloride, tetradecyl ester	93
6302	1-ethyl-3-hydroxy-1-methyl----- bromide, benzilic acid ester	86
	Pseudoindolium compounds.	
4744	2-[4-[(2-chloroethyl)ethylamino]-2-methylstyryl]-1,3,3-trimethyl-3H------ chloride	99
4742	2-[p-[(2-chloroethyl)methylamino]styryl]-1,3,3-trimethyl-3H------ chloride	87
4719	2-[2-(2,4-dimethoxyanilino)vinyl]-1,3,3-trimethyl-3H----- chloride	66
4740	1,3,3-trimethyl-2-[2-[[2-methylbenzothiazol-5(or 6)-yl]-amino]vinyl]-3H------ chloride	90
4741	1,3,3-trimethyl-2-[2-(2-methyl-1-indolyl)vinyl]-3H----- chloride	90
4746*	1,3,3-trimethyl-2-[2-(1-methyl-2-phenyl-3-indolyl)-vinyl]-3H------ chloride	100
	Pyridinium compounds.	
3613	1-(carboxymethyl)----- chloride, hydrazide	100
6317	1-(6-chloro-3-phenanthrylcarbonylmethyl)----- bromide	-36
3799	1-(2,4-dinitrophenyl)----- chloride	87
3417	1-dodecyl-2,4-dimethyl----- p-toluenesulfonate	97
3661	1-[2-(dodecylthio)ethyl]----- chloride	97
4122	1-methyl-2-(3-phenyl-1,3-butadienyl)----- methyl sulfate, polymer	58
3665	1-[2-(octylthio)ethyl]----- chloride	97
3979	1-pentyl----- benzenesulfonate	88
	Pyrrolidinium compounds.	
2748	1-benzyl-1-methyl-2-(3-pyridyl)----- thiocyanate	89
2744	1-butyl-1-methyl-2-(3-pyridyl)----- thiocyanate	92
2727	1-butyl-1-methyl-2-(3-pyridyl)----- p-toluenesulfonate	97
2747	1-(o-chlorobenzyl)-1-methyl-2-(3-pyridyl)----- thiocyanate	93

TABLE I

Code No.	Classification and Name	K Value
	QUATERNARY NITROGEN COMPOUNDS	
	Heterocyclic Compounds	
	Pyrrolidinium compounds.	
2745	1-(2,4-dichlorobenzyl)-1-methyl-2-(3-pyridyl)----- chloride	90
2746	1-(3,4-dichlorobenzyl)-1-methyl-2-(3-pyridyl)----- chloride	80
2740	1,1-dimethyl-2-(3-pyridyl)----- bromide	62
6548*	1-dodecyl-1-ethyl-2,5-dimethyl----- ethyl sulfate	93
2753	1-dodecyl-1-methyl-2-(3-pyridyl)----- chloride	84
2805	1-dodecyl-1-methyl-2-(3-pyridyl)----- oleate	88
2786	1-dodecyl-1-methyl-2-(3-pyridyl)----- p-toluene-sulfonate	83
6553	1-ethyl-2,5-dimethyl----- ethyl sulfate	100
2752	1,1'-ethylenebis[1-methyl-2-(3-pyridyl)----- bromide	94
6549	1-hexadecyl-1-methyl----- methyl sulfate	71
2731	1-hexadecyl-1-methyl-2-(3-pyridyl)----- bromide	94
2725	1-hexadecyl-1-methyl-2-(3-pyridyl)----- thiocyanate	100
2785	1-hexadecyl-1-methyl-2-(3-pyridyl)----- p-toluene-sulfonate	85
2749	1-methyl-1-octyl-2-(3-pyridyl)----- iodide	92
2750	1-methyl-1-octyl-2-(3-pyridyl)----- thiocyanate	85
	Quinolinium compounds.	
6069	4-chloro-2-[p-(dimethylamino)phenyliminomethyl]-6-methoxy-1-methyl----- chloride	89
3415	1-dodecyl----- p-toluenesulfonate	89
	Thiamorpholinium compounds.	
6550, 6551	4-hexadecyl-4-methyl----- methyl sulfate	83, 96
	QUINONES	
5052	Acetamide, N-2-anthraquinonyl-	58
7067	Antraquinone, 1-amino-	40
3274	-----, 1-benzamido-4-chloro-	7
3910	-----, 2-chloro-	18
2899	-----, 2-ethyl-	79
5324	1-Anthraquinonecarbamic acid, 4-hydroxy-, methyl ester	-42
5344	pentyl ester	0
3401	1-Anthraquinonecarboxylic acid	30
3255	2-Anthraquinonesulfonic acid, sodium salt	7
6697	p-Benzoquinone, 2,5-bis(2-pyridylamino)-	21
3630	-----, 2,6-dichloro-	67
5271	-----, 2,5-dihydroxy-	84
4131	-----, p-ethoxyphenyl-	52
3438	-----, tetrabromo-	17

TABLE I

Code No.	Classification and Name	K Value
	QUINONES	
7285	Chloranil	37
3222	Diphenoquinone, octachloro-	94
3127	1,4-Naphthoquinone, 2-methoxy-	85
5510	-----, imine, 2-amino-, monohydrochloride	100
2900	Quinizarin	35
3129	p-Quinone, 2,5-bis(1,1,3,3-tetramethylbutyl)-	13
2974	Thymoquinone	91
	SEMICARBAZIDES	
5797	Semicarbazide, 2-(2-hydroxyethyl)-	93
7113	-----, 1-maleoyl-	55
7192	-----, 1-phenyl-	81
	SEMICARBAZONES	
	Unsubstituted	
3836	Acetophenone, semicarbazone	25
5277	2-Butanone, semicarbazone	99
5278	Cyclohexanone, semicarbazone	100
4179	2,4-Pentadienal, semicarbazone	10
5793	Semioxamazide	84
	Substituted	
5786, 7193	2-Furaldehyde, semicarbazone	88, 99
2796	-----, 5-nitro-, semicarbazone	37
2799	semioxamazone	85
6696	Ketone, methyl 5-nitro-2-furyl, semicarbazone	97
3856	2-Thiophenecarboxaldehyde, semicarbazone	73
	SULFAMIDES	
6705	Sulfamide, N'-antipyrinyl-N,N-dimethyl-	71
6706	-----, N'-2-biphenylyl-N,N-dimethyl-	71
6409	-----, N,N'-bis(1,1,3,3-tetramethylbutyl)-	40
	SULFANILAMIDES	
4855	Acetanilide, p-(N-cyanosulfamoyl)-, N^4-calcium salt	51
6292	1,3-Propanedisulfonic acid, 1-phenyl-3-(p-sulfamoylanilino)-, disodium salt	17
6643	Pyrazine, 2,3-bis(N^4-acetylsulfanilamido)-5,6-dimethyl-	62

TABLE I

Code No.	Classification and Name	K Value
	SULFANILAMIDES	
3922	Sulfanilamide	43
7183	-----, N^4-(bromoacetyl)-	38
6668	-----, N^1-(5-bromo-2-pyrimidinyl)-	80
6240	-----, N^1-(3,4-dimethyl-5-isoxazolyl)-	14
6709	-----, N^1-(5,5-dimethyl-2-thiazolin-2-yl)-	35
6386	-----, N^4-methylene-N^1-2-thiazolyl-, sodium derivative	12
6479	-----, N^1-(6-methyl-3-pyridazinyl)-	25
6974	-----, N^1-2-pyridyl-	44
3923, 7069	-----, N^1-2-thiazolyl-	20, 88
6068	Sulfanil-p-anisidine, N^4-(1-sulfoethyl)-2'-(1-sulfoethylamino)-, disodium salt, tetrahydrate	24
3645	4'-(2-Thiazolylsulfamoyl)phthalanilic acid	24
	SULFENAMIDES	
3118, 3506		51, 89
7292*	2-Benzothiazolesulfenamide, N-cyclohexyl-	52
3119	2-Thiazoleethylsulfenamide, N,N-dipentyl-	88
	SULFIDES	
	Monosulfides	
5147	Acetamide, N-butyl-2-(pentachlorophenylthio)-	51
3047	Acetic acid, [(2-benzothiazolyl)thio]-	89
4753	-----, chloro-, diester with 4,4'-thiodiphenol	90
5146	-----, pentachlorophenylthio-, methyl ester	80
4304	Acetophenone, 2-benzylthio-	55
4112	Benzenesulfonic acid, thiol-, phenyl ester	71
5045	Benzothiazole, 2-[(3-butenyl)thio]-	87
4298, 4857	Butyronitrile, 2-hydroxyethyl-4-(methylthio)-	93, 87
4530*	Carbamic acid, dimethyldithio-, tert-butylthio ester	99
7129	Coumarin, 3,3'-thiobis[4-hydroxy-	64
5432	o-Cresol, 6,6'-thiobis[4-chloro-α-(dimethylamino)-	97
7105	Cyclohexanone, 2-[(p-chlorophenyl)thio]-	97
3641	Ethanol, 2-[(2-benzothiazolyl)thio]-	97
3410	-----, 2,2'-(decamethylenedithio)di-	61
3691	Ether, pentachlorophenyl 2-(phenethylthio)ethyl	83
6647	Glyoxal, bis(dimethylthio acetal)	96
6645	Hydantoin, 5-phenyl-5-(phenylthiomethyl)-	73
5990	Hydratroponitrile, 3-(butylthio)-	88
3654	Melamine, N^2,N^4,N^6-tris(2-benzothiazolylthiomethyl)-	3
3297, 7117	Methane, bis(p-chlorophenylthio)-	71, 94
3317	-----, bis(dodecylthio)-	-131
2908	Phenol, 2,2'-thiobis[4-tert-butyl-	79

TABLE I

Code No.	Classification and Name	K Value
	SULFIDES	
	Monosulfides	
4690	Phenol, 2,2'-thiobis[4-chloro-	95
5434	salt with 1 f. wt. dimethylamine	76
3712	Phthalimide, 1,2,3,6-tetrahydro-, N-trichloromethylthio-	57
7269	2-Pipecoline, 1-(5-methyl-2-methylthiobenzyl)-, hydrochloride	63
4717	Propionic acid, 3,3'-thiodi-, bis(1-methylheptyl) ester	55
4716	dibutyl ester	65
4715	diethyl ester	65
3233	Propionitrile, 3-(p-chlorophenylthio)-	97
3756	-----, 3,3'-thiodi-	68
5705	Pseuodourea, 2,2'-(thiodimethylene)bis[2-thio-, dihydrochloride	97
	Pyridinium compounds.	
3661	1-[2-(dodecylthio)ethyl]----- chloride	97
3665	1-[2-(octylthio)ethyl]----- chloride	97
4046	Sulfide, bis[(2-nitro-1-phenyl)ethyl]	28
4038	-----, bis[(2-nitro-1-phenyl)propyl]	99
7104	-----, p-chlorobenzyl 2-thienyl	93
5951	-----, 2-chlorocyclohexyl 2,4-dinitrophenyl	36
7116	-----, 2-chloroethyl phenyl	98
3241	-----, dibenzoyl	-7
7211	-----, ethyl p-tolyl	55
6970	Tin, bis(butylthio)didodecyl-	56
6969*	-----, dibutylthioxo-	100
4339	s-Triazine, 2,4-diamino-6-(methylthio)-	100
	Polysulfides	
4883	Benzoic acid, 2,2'-dithiodi-, bis(2,4-dichlorobenzylidene-hydrazide)	19
4882	dihydrazide, dihydrochloride	90
7055	Disulfide, bis(2-amino-5-sulfamoylphenyl)	69
3787	-----, bis(p-chlorophenyl)	0
3040	-----, bis(o-nitrophenyl)	27
7219	-----, bis(5-nitroquinol-8-yl)	11
5388	-----, dibenzyl	85
3788	-----, di-p-tolyl	63
5561	Ethanol, 2,2'-dithiodi-, bis(p-nitrobenzoate)	27
3362	Piperidine, 1,1'-[dithiobis(1-methylethylene)]di-, dihydrochloride	93
3023	Tetrasulfide, bis(benzenesulfonyl)	-20
3653	Trisulfide, bis(morpholinothiocarbonyl)	34

TABLE I

Code No.	Classification and Name	K Value
	SULFINIC ACIDS	
3945	Benzenesulfinic acid, p-chloro-, sodium salt	89
	SULFONAMIDES	
	Unsubstituted	
7054	Benzenesulfonanilide	89
7195	o-Toluenesulfonamide	85
7061	p-Toluenesulfonamide	71
3323	o(and p)-Toluenesulfonamide, N-ethyl-, 60 percent p- isomer	73
3724	p-Toluenesulfonanilide, N-allyl-	24
5035	p-Toluenesulfono-p-toluidide	44
	Substituted	
3644	Acetanilide, 4'-sulfamoylthiazol-2-yl-	-35
5040	-----, 2,2,2-trichloro-4'-sulfamoyl-	91
3016	Benzenearsonic acid, p-(4-biphenylylsulfamoyl)-	100
3013	-----, p-morpholinylsulfonyl-	81
3014	-----, p-(1-piperidylsulfonyl)-	56
3011	-----, p-sulfamoyl-	77
4491	Benzenesulfonamide, N,N-bis(2-cyanoethyl)-	91
3137	-----, 2,5-dimethoxy-	81
2859	-----, p-1-pyrrolyl-	51
3015	Benzenesulfonanilide, 4-arsenoso-	45
3139	-----, 2,5-dihydroxy-	46
4413	p-Benzenesulfonotoluidide, 4-bromo-	88
5889	1,2-Benzisothiazolin-3-one, 2-methyl-, 1,1-dioxide	42
4799	d-Camphorsulfonamide, N-butyl-	73
7055	Disulfide, bis(2-amino-5-sulfamoylphenyl)	69
4932	Ethanol, 2-(2-chloro-3,5-dinitrobenzenesulfonamido)-	93
2860	D-Glucoanilide, p-sulfamoyl-	-21
6690	Hexanilide, 4'-sulfamoyl-	59
5660	2-Imidazoline, 1-[2-(3,4-dichlorobenzenesulfonamido)-ethyl]-2-[(3,4-dichlorobenzyl)thio]-	54
3012	Morpholine, 4-(p-arsenosophenylsulfonyl)-	60
3964	-----, 4-(p-chlorophenylsulfonyl)-	29
3963	-----, 4-(3,4-dichlorophenylsulfonyl)-	74
6704	-----, 4,4'-sulfonyldi-	68
6708	4-Morpholinesulfonamide, N,N-dimethyl-	66
6315	Phthalanilic acid, 4'-(acetylsulfamoyl)-, dihydrate	21
6707	1-Piperidinesulfonamide, N,N,2-trimethyl-	93
5433	p-Toluenesulfonamide, N-methyl-N-(9-oxo-2-fluorenyl)-	24
5089	p-Toluenesulfonanilide, 3-chloro-N-(2-cyanoethyl)-	84

TABLE I

Code No.	Classification and Name	K Value
	SULFONAMIDES	
	Substituted	
5935	s-Triazine, 2-amino-4-benzenesulfonamido-6-phenyl-	15
5694	-----, 4-amino-6-benzenesulfonamido-2-phenyl-	40
	SULFONES	
	Unsubstituted	
7188	Phenyl sulfone	74
3795	Thianaphthene, 1,1-dioxide	84
5527	Thiophene, 2,5-dihydro-, 1,1-dioxide	85
5872	-----, 2,5-dihydro-3-methyl-, 1,1-dioxide	85
	Substituted	
3776	Acetonitrile, benzenesulfonyl-	71
6636	Aniline, 3-chloro-4,4'-sulfonyldi-	81
6637	-----, N-propyl-4,4'-sulfonyldi-	75
6239	-----, 4,4'-sulfonyldi-	47
2921	o-Anisidine, 5-(ethylsulfonyl)-	32
4563	Benzaldehyde, p-ethylsufonyl-, 2-benzoxazolylhydrazone	-7
6635	Benzamidine, p-(methylsulfonyl)-, monohydrochloride	63
4112	Benzenesulfonic acid, thiol-, phenyl ester	71
3293	Benzoic acid, p,p'-sulfonyldi-, dibutyl ester	-22
5754	Butyric acid, 4-(2-formamidoethylsulfonyl)-	27
5337	-----, 4,4'-(trimethylenedisulfonyl)di-	-10
5130	4,4'-Ditolyl sulfone, 3,3'-diacetamido-	39
6703	Dodecylamine, N-[p-(sulfanilyl)phenyl]-	-20
6638	Nicotinanilide, 4'-sulfanilyl-	64
5046	Phenol, 4,4'-sulfonyldi-, diacetate	62
3616	Phenoxathiin, 10,10-dioxide	80
3780	Propionitrile, 3-benzenesulfonyl-	26
6291	Pyridine, 5-amino-2-sulfanilyl-	77
6639	Succinanilic acid, 4'-[p-(2,5-dimethyl-1-pyrrolyl)-phenylsulfonyl]-	53
4835	Sulfone, bis(p-chlorophenyl)	87
4809	-----, tert-butyl 2-chloroethyl	97
3458	-----, 2-chloroethyl dodecyl	19
3315	-----, 2-chloroethyl phenethyl	100
3231	-----, p-chlorophenyl cyanomethyl	91
3023	Tetrasulfide, bis(benzenesulfonyl)	-20
7073	Thianaphthene, 2-bromo-, 1,1-dioxide	86
7072	-----, 2,3-dibromo-2,3-dihydro-, 1,1-dioxide	92
2920	m-Toluidine, 6-ethylsulfonyl-, α,α,α-trifluoro-	71

TABLE I

Code No.	Classification and Name	K Value
	SUIFONIC ACIDS	
	Unsubstituted	
3177	Benzenesulfonic acid, x-dodecyl-, hexylamine salt	40
3087	4-Biphenylsulfonic acid, sodium salt	35
6837	Butanesulfonic acid, sodium salt	-68
6394	x-Naphthalenesulfonic acid, x,x-diisopropyl-, sodium salt	78
	Substituted	
3255	2-Anthraquinonesulfonic acid, sodium salt	7
4236	-----, 1,4-dihydroxy-, manganese(II) salt	70
5558	Benzenediazonium compounds. 4,4'-vinylenebis[3-sulfo----- chloride	-4
7198	Benzenesulfonic acid, p-(4,5-dihydro-3-methyl-5-oxopyrazol-1-yl)-	51
5550	-----, p-hydrazino-	58
4002	Benzoic acid, 4-nitro-2-sulfo-, potassium-(sulfonate) salt	16
3479	2-Benzothiazolesulfonic acid, calcium salt	55
4248	2,2'-Biphenyldisulfonic acid, 4,4'-diamino-	-130
3450	3,3'-Biphenyldisulfonic acid, 4,4'-diamino-	79
3439	d-10-Camphorsulfonic acid	70
6393	m(or o)-Cumenesulfonic acid, 6(or 5)-tert-butyl-5(4 or 6)-hydroxy-, sodium salt	55
4012	Isethionic acid	-19
5295	Metanilic acid, 6-(p-aminoanilino)-	50
5391	Methanesulfonic acid, hydroxy-, sodium salt	36
4120	2,7-Naphthalenedisulfonic acid, 3-(p-aminophenylazo)-4,5-dihydroxy-, disodium salt	23
6414	1,5-Naphthalenedisulfonic acid, 4-(2-mercapto-4,4,6-trimethyl-1(4H)-pyrimidinyl)-	59
6413	2-Naphthalenesulfonic acid, 5-(2-mercapto-4,4,6-trimethyl-1(4H)-pyrimidinyl)-	23
3273	1,3,6-Naphthalenetrisulfonic acid, 8-amino-, disodium salt	6
4023	Naphthionic acid, sodium salt	14
2978	2-Naphthoic acid, 3-hydroxy-7-sulfo-	67
7253	Phenol, 2,4-dichloro-, benzenesulfonate	74
6292	1,3-Propanedisulfonic acid, 1-phenyl-3-(p-sulfamoylanilino)-, disodium salt	17
4751*	2-Pyrazoline-3-carboxylic acid, 5-oxo-1-(o-sulfophenyl)-4-(o-sulfophenylazo)-, salt with 2 f. wt. dicyclohexylamine	100
6068	Sulfanil-p-anisidide, N4-(1-sulfoethyl)-2'-(1-sulfoethylamino)-, disodium salt, tetrahydrate	24

TABLE I

Code No.	Classification and Name	K Value
	SULFONIC ACIDS	
	Substituted	
2919	Sulfanilic acid, N,N-dimethyl-	62
6757	Succinamic acid, N-(tert-butylcarbamoyl)-2(or 3)-sulfo-, sodium salt, dodecyl ester	56
6756	isopropyl ester	43
6755	methyl ester	66
6754	-----, N-carbamoyl-(2 or 3)-sulfo-, sodium salt, dodecyl ester	-16
6753	methyl ester	-27
6412	m-Toluenesulfonic acid, 6-(2-mercapto-4,4,6-trimethyl-1(4H)-pyrimidinyl)-	50
6391	o-Toluic acid, α-hydroxy-x-sulfo-, γ-lactone, copper(II) salt	60
5761	s-Triazine, 2,4-diamino-6-(3-sulfopropyl)-, sodium salt	45
	SULFONIC ACID ESTERS	
5230	Benzenesulfonic acid, p-chloro-, p-bromophenyl ester	66
5228	p-chlorophenyl ester	71
5229	2,4-dichlorophenyl ester	28
5410	-----, p-methoxy-, p-chlorophenyl ester	51
2794	α-Conidendrin, di-p-toluenesulfonate	22
2795	β-Conidendrin, di-p-toluenesulfonate	15
6836	Sulfonic acid, trichlorovinyl-, x,x,x-trichloroethyl ester	82
	SULFONYL HALIDES	
3828	4,4'-Biphenyldisulfonyl difluoride	-30
4316	β-Styrenesulfonyl chloride, p-nitro-	46
	SULFOXIDES	
3436	Ethanol, 2,2'-sulfinyldi-	-44
2858	Phenothiazine, 5-oxide	-11
2849, 4202	Phenoxathiin, 10-oxide	96, 99
3272	Sulfoxide, 2-chloroethyl 2,4-dinitrophenyl	93
5822	-----, dimethyl	29
	THIOAMIDES	
4833*	Acetamide, (N,N-dimethyl)thio-	92
4834	-----, (N-methyl)thio-	100
3792, 7060	Acetanilide, thio-	90, 89

TABLE I

Code No.	Classification and Name	K Value
	THIOAMIDES	
7080	Benzanilide, thio-	89
5322	Carbohydrazide, 3-thio-1-thiocarbamoyl-	69
3723	Morpholine, 4-(2-naphthylthioacetyl)-	78
3725	-----, 4-[(5,6,7,8-tetrahydro-2-naphthyl)thioacetyl]-	32
4484	Oxamide, N,N'-didodecyldithio-	48
3737	Thiooxanilonitrile	-9
	THIOCARBAMATES	
	Unsubstituted	
3204	Carbamic acid, cyclohexylthio-, O-ethyl ester	94
7287	-----, dibenzyldithio-, zinc salt	47
6971	-----, dibutyldithio-, dibutyltin(IV) salt	78
3022	-----, dicyclohexyldithio-, dicyclohexylammonium salt	79
3966	-----, diethyldithio-, anhydrosulfide with p-chloro-thiolbenzenesulfonic acid	96
3049	benzyl ester	94
3952	copper(II) salt	50
3953	mercury(II) salt	72
3954	sodium salt	69
2990	-----, dimethyldithio-, copper(II) salt	100
7288	zinc salt	83
3221	-----, N,N'-ethylenebis[N-butyldithio-, zinc salt	22
5948	-----, ethylenebis[dithio-, bismuth(III) salt	65
3096	nickel(II) salt	67
5481	-----, ethylthio-, S-phenyl ester	94
4529	-----, 2-naphthyldithio-, ammonium salt	99
5949	-----, (3,5,5-trimethylhexyl)dithio-, zinc salt	91
4335	Carbanilic acid, dithio-, methyl ester	93
3298	-----, thio-, O-allyl ester	88
5814	2-Oxazolidinethione, 4-ethyl-	88
3662	1-Piperidinecarbodithioic acid, 1-piperidinium salt	86
5812	2-Thiazolidinethione, 4,4-dimethyl-	98
5549	-----, 3-(2-ethylbutyl)-	96
5548	-----, 3-isopropyl-	100
5547	-----, 5-methyl-	99
	Substituted	
5145	Acetic acid, dibutyldithiocarbamoyl-, p-chloro-phenyl ester	72
5142	ethyl ester	84
5445	-----, (N,N-diethyldithiocarbamoyl)-	80

TABLE I

Code No.	Classification and Name	K Value
	THIOCARBAMATES	
	Substituted	
5144	Acetic acid, diethyldithiocarbamoyl-, p-chlorophenyl ester	100
5140	ethyl ester	90
3970	2-(pentachlorophenoxy)ethyl ester	97
5141	-----, dimethyldithiocarbamoyl-, butyl ester	92
5143	ethyl ester	65
3655	-----, [(1-piperidyl)carbodithio]-	83
3643	Carbamic acid, (2-aminoethyl)dithio-	77
3960	-----, bis(2-hydroxyethyl)dithio-, copper(II) salt	90
3961	mercury(II) salt	-16
4528	-----, o-bromophenyldithio-, ammonium salt	99
3219	-----, N-(2-cyanoethyl)-N-2-[[(2-cyanoethyl)amino]-ethyl]dithio-	63
3906	-----, N-(2-cyanoethyl)-N-ethyldithio-, zinc salt	74
3968	-----, diethyldithio-, diester with 2,2'-oxydiethanethiol	95
3050	2,4,6-trichlorobenzyl ester	96
4530*	-----, dimethyldithio-, tert-butylthio ester	99
7090	2-(2,4-dichlorophenoxy)ethyl ester	73
7103	2-thienyl ester	96
4031	m-toluidinomethyl ester	100
7091	2-(p-tolyloxy)ethyl ester	49
4146	-----, 3,3-dinitro-1,5-pentamethylenebis[thio-, diphenyl ester	-15
5444	-----, dithio-, ethylenebis-S,S'-bis(2-bromoethoxycarbonyl)	83
6451	[2-(2-thioxoimidazolidin-1-yl)ethyl]-, sodium salt, trihydrate	71
3216	-----, ethylenebis[N-(2-cyanoethyl)dithio-, copper(II) salt	29
3056	disodium salt	47
3057	zinc salt	70
5659	-----, thio-, 2-[2-(octadecylthio)-2-imidazolin-1-yl]-ethyl-, 3,4-dichlorobenzyl ester, hydrobromide	35
6763	-----, thiol-, maleimidomethyl-, butyl ester	99
5138	Carbamoyl chloride, diethylthio-	95
3058	Cyclohexanecarbamic acid, N-2-(cyclohexylamino)-ethyldithio-	57
3660	Hydrosulfamine, N-cyclohexyl-S-(1-piperidylthiocarbonyl)-	82
3956	4-Morpholinecarbodithioic acid, copper(II) salt	-118
3967	diester with 2,2'-oxydiethanethiol	63
3962	2-hydroxyethyl ester	49
3957	mercury(II) salt	92
3958	sodium salt	91

TABLE I

Code No.	Classification and Name	K Value
	THIOCARBAMATES	
	Substituted	
3969	Morpholinocarbodithioic acid, ester with 2-(pentachlorophenoxy)ethyl mercaptoacetate	78
4073*	2H-1,3,5-Thiadiazine-2-thione, tetrahydro-3,5-dimethyl-	94
5139	1,3,4-Thiadiazole, 2,5-bis(diethyldithiocarbamoyl)-	45
5456	2-Thiazolidinethione, 3-ethylcarbamoyl-	95
4471	Rhodanine, 5-(3,4-dichlorobenzylidene)-	86
5457	-----, 3,3'-hexamethylenebis-	15
5555	-----, 5-vanillylidene-	67
	THIOCARBOHYDRAZIDES	
5321	Carbohydrazide, 1-carbamoyl-3-thio-	21
5323	-----, 3-thio-	(T)
5322	-----, 3-thio-1-thiocarbamoyl-	69
	THIOCARBONATES	
5508	Acetic acid, di-, trithiocarbonate ester	80
4059	Benzimidazole, 2-[(ethoxycarbonyl)thio]-	97
5170	Carbonic acid, thiol-, S-allyl O-pentachlorophenyl ester	88
4048	-----, trithio-, bis(2-benzimidazolyl) ester	86
5488	cyclic ester with ethylene glycol	97
4552*	Carbazic acid, dithio-, ammonium salt	97
4553	methyl ester	(T)
4714	Xanthic acid, butyl-, ester with mercaptoacetic acid, calcium salt	86
4235	-----, sec-butyl-, potassium salt	80
6466	zinc salt	33
4418	-----, tert-butyl-, arsenic(III) salt	97
6390	-----, cyclohexyl-, zinc salt	56
4109	-----, ethyl-, anhydrosulfide with O-ethylthiolcarbonate	96
3209	2,4,6-trichlorobenzyl ester	96
6241	zinc salt	-17
6242	-----, isopropyl-, lead(II) salt	89
6243	zinc salt	-6
7295	Xanthogen disulfide, dibutyl-	86
3052	-----, diethyl-	91
	THIOCARBOXYLATES	
5455	2-Imidazolidinethione, 1-methyldithiocarbonyl-	91

TABLE I

Code No.	Classification and Name	K Value
	THIOCARBOXYLATES	
7213	Quinoline, 5-acetamido-8-thioacetyl-	60
6762	Succinimide, α-acetoxythio-N-carbamoyl-x-pentyl-	64
	THIOCYANATES AND ISOTHIOCYANATES	
	Unsubstituted	
4531	Isothiocyanic acid, 2-naphthyl ester	100
5287	phenyl ester	99
2970	Thiocyanic acid, dodecyl ester	91
3851	p-phenylenedimethylene ester	40
	Monosubstituted	
	Esters	
5674	Acetic acid, thiocyanato-, 1,3-dimethylbutyl ester	93
5668	Benzoic acid, thiocyanatomethyl ester	99
5663	Dodecanoic acid, thiocyanatoethyl ester	75
5673	Octanoic acid, 2-thiocyanatoethyl ester	83
5672	Propionic acid, 3-thiocyanato-, ethyl ester	65
5671	methyl ester	77
	Ethers	
5675	Ethane, 1,2-bis(2-thiocyanatoethoxy)-	96
3959, 5661	Ether, bis(2-thiocyanatoethyl)	51, 89
5662*	-----, 2-butoxyethyl 2-thiocyanatoethyl	98
5664	-----, 2-(p-octylphenoxy)ethyl 2-thiocyanatoethyl	85
3797	-----, phenyl 2-thiocyanatoethyl	79
	Halides	
4527	Isothiocyanic acid, x-bromophenyl ester	100
5442*	m-chlorophenyl ester	97
3859	Thiocyanic acid, 2,3,4,5,6-pentachlorocyclohexyl ester	90
	Phenols	
4062	Thiocyanic acid, 5-tert-butyl-4-hydroxy-m-tolyl ester	99
4056	3-ethyl-4-hydroxyphenyl ester	100
4061	5-hydroxycarvacryl ester	91
4060	4-hydroxy-m-cumenyl ester	100
4050	p-hydroxyphenyl ester	100
4055	4-hydroxy-m-tolyl ester	100
4057	4-hydroxy-2,6-xylyl ester	93
4058	4-hydroxy-3,5-xylyl ester	100
	Miscellaneous	
5670	Acetanilide, 4'-thiocyanato-	81

TABLE I

Code No.	Classification and Name	K Value
	THIOCYANATES AND ISOTHIOCYANATES	
	Monosubstituted	
	Miscellaneous	
7115	Benzothiazole, 2-thiocyanato-	80
6759*	Maleimide, N-thiocyanatomethyl-	99
5680*	Thiocyanic acid, p-(dimethylamino)phenyl ester, salt with toluenesulfonic acid	99
3682	2,4-dinitrophenyl ester	68
3796	phenacyl ester	83
	Polysubstituted	
3965	Acetic acid, thiocyanato-, 2-(pentachlorophenoxy)-ethyl ester	85
5676	Butanal, 3-chloro-, bis[2-(2-thiocyanatoethoxy)-ethyl] acetal	87
4488	2,5-Cresotic acid, α-thiocyanato-	31
5677	Orthophosphorous acid, bis[2-(2-thiocyanatoethoxy)-ethyl] ester	82
5667	Phenetole, p-chloro-β-thiocyanato-	100
5666	-----, 4-(1-methylheptyl)-x-nitro-β-(2-thiocyanato-ethoxy)-	80
5665	-----, 2-nitro-4-tert-pentyl-β-thiocyanato-	98
5678	Phosphonic acid, (2,2,3-trichloro-1-hydroxybutyl)-, bis[2-(thiocyanatoethoxy)ethyl] ester	84
5679	-----, (2,2,2-trichloro-1-hydroxyethyl)-, bis[2-(2-thiocyanatoethoxy)ethyl] ester	84
5669	Thiocyanic acid, 3-chloro-4-(dimethylamino)phenyl ester	100
3843	2-thenoylmethyl ester	83
3842	Thiophene, 5-chloro-2-(1,2-dithiocyanatoethyl)-	55
	THIOLS	
6019	Acetanilide, 2-mercapto-	83
5117	Acetic acid, [(2-amino-5-ethoxyphenyl)thio]-	81
5213	Benzenethiol, pentachloro-	66
4881	Benzoic acid, o-mercapto-, 2,4-dichlorobenzylidene-hydrazide	10
6233	Benzothiazole, 6-amino-2-mercapto-	92
3690, 5458	-----, 5-chloro-2-mercapto-	75, 89
3590	-----, 2-phenylmercurithio-	75
3021	2-Benzothiazolethiol, compound with cyclohexylamine	79
3326	copper(II) derivative	45
3921, 7286	zinc derivative	35, 0
3033	-----, 4-phenyl-	-34
3648	2-Benzoxazolethiol	73

TABLE I

Code No.	Classification and Name	K Value
	THIOLS	
3688	Carbanilic acid, 2-mercaptoethyl ester	80
5994	Isobarbituric acid, 5-thio-	47
3592	Mercury, (dodecylthio)phenyl-	-11
3591	-----, phenyl(phenylthio)-	94
3593	-----, phenyl(tetradecylthio)-	87
5097	Propionitrile, 3-(p-tolylthio)-	90
4682	2-Pyridinethiol, 1-oxide, sodium derivative	100
3663	2-Quinolinethiol	89
4554	4H-1,3,4-Thiadiazine-2-thiol, 5-phenyl-	99
6473	1,2,4-Thiadiazole, 3,5-bis(ethylmercurithio)-	65
3647	1,3,4-Thiadiazole-2,5-dithiol	42
4052	6H-1,3-Thiazine-2-thiol, 4,6,6-trimethyl-, copper(I) derivative	19
6510*	sodium derivative	96
6511	zinc derivative	97
7106	4H-1,2,4-Triazole, 4-amino-3-hydrazino-5-mercapto-	96
5521	Valine, N-acetyl-3-mercapto-	34
	THIONES	
5528	Pyruvic acid, (4-hydroxy-3-methoxyphenyl)-2-thio-	71
	THIOSEMICARBAZIDES	
7037	Semicarbazide, 4-phenyl-3-thio-	96
	THIOSEMICARBAZONES	
3706	Acetanilide, p-formyl-, thiosemicarbazone	37
5929	Acetoacetic acid, thiosemicarbazone, ethyl ester	100
5818	p-Anisaldehyde, thiosemicarbazone	76
3703	Benzaldehyde, p-(dimethylamino)-, thiosemicarbazone	25
3705	-----, p-hydroxy-, thiosemicarbazone	21
3898	-----, p-nitro-, thiosemicarbazone	76
3635	Mucochloric acid, thiosemicarbazone	68
	THIOUREAS	
	Unsubstituted	
4053	2-Benzimidazolethiol, copper(II) derivative	96
4054	zinc derivative	92
4135	Biurea, 2,5-dithio-	24
7218	2-Imidazolethiol, 1-ethyl-	83
2775	2-Imidazolidinethione	66

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Code No.	Classification and Name	K Value
	THIOUREAS	
	Unsubstituted	
3646	2-Imidazolidinethione, 1,3-diphenyl-	5
3218	2-Imidazolidinone, 2-thio-	54
4487*	2-Imidazoline, 2-dodecylthio-	89
5637	hydrobromide	83
5653	-----, 2,2'-ethylenedithiobis-, dihydrobromide	90
5655	-----, 2-[[2-(imidazolin-2-ylthio)-1-vinylethyl]thio]-, dihydrochloride	88
5641	-----, 2-octadecylthio-	62
5639	-----, 2-tetradecylthio-, hydrobromide	94
5638	-----, 2-[(5,5,7-trimethyl-2-octenyl)thio]-, hydrochloride	97
5630*	Pseudourea, 2-allyl-2-thio-, compound with ethylenebis(thiocarbamic acid)	98
5631*	compound with 6-(1-methylheptyl)-2,4-dinitrophenol	96
5629	hexafluosilicate	85
5691*	hydrochloride	98
3551	-----, 2-benzyl-2-thio-, acetate	100
3553	crotonate	94
5359*	hexafluorophosphate	97
3549, 3550	hydrochloride	100, 90
3552	myristate	85
3547	picrate	92
3557	propionate	99
3554	succinate	80
3555	p-toluate	100
5706	-----, 2,2'-bis[2-thio-, dipicrate	94
5450	-----, 2,2'-(2-butenylene)bis[2-thio-, dihydrobromide	81
3597	-----, 2-butyl-2-thio-, hydrobromide	83
3695	hydroiodide	94
3702	-----, 2-sec-butyl-2-thio-, hydroiodide	94
5690	-----, 2-decyl-2-thio-, hydrobromide	99
5711	-----, 1,3-dibutyl-2-octadecyl-2-thio-, hydrobromide	96
5709	-----, 1,3-dimethyl-2-octadecyl-2-thio-, hydrobromide	99
5712	-----, 1,3-dimethyl-2-octyl-2-thio-, hydrobromide	90
5713	-----, 1,3-dimethyl-2-tetradecyl-2-thio-, hydrobromide	91
5697	-----, 1,3-diphenyl-2-propenyl-2-thio-, hydrobromide	79
5708	-----, 2-dodecyl-1,3-dimethyl-2-thio-, hydrochloride	98
5692	salicylate	95
3599	-----, 2-dodecyl-2-thio-, hydrobromide	85
3598, 5633	hydrochloride	95, 87
3481, 7216	-----, 2-ethyl-2-thio-, hydrobromide	82, 76
3693	hydroiodide	86
3559	-----, 2-heptyl-2-thio-, hydrobromide	92

TABLE I

Code No.	Classification and Name	K Value
	THIOUREAS	
	Unsubstituted	
5628	Pseudourea, 2-hexadecyl-2-thio-, compound with 6-hexyl-2,4-dinitrophenol	84
3596	hydroiodide	73
3696	-----, 2-isobutyl-2-thio-, hydrobromide	96
3818	hydroiodide	85
3694	-----, 2-isopropyl-2-thio-, hydrobromide	93
3556	-----, 2-methyl-2-thio-, hydroiodide	81
3482	sulfate	85
3483	-----, 2-pentyl-2-thio-, hydrobromide	97
3600	-----, 2-propyl-2-thio-, hydrobromide	85
3726	hydroiodide	95
5696	-----, 2-tetradecyl-2-thio-, hydrobromide	80
5710*	-----, 1,2,3-tributyl-2-thio-, hydrobromide	99
6465	2-Pyrimidinethiol, 1,1'-(4,4'-biphenylene)bis[1,4-dihydro-4,4,6-trimethyl-	67
6407	-----, 1-(2-cyclohexylcyclohexyl)-1,4-dihydro-4,4,6-trimethyl-	84
6404	-----, 1-cyclohexyl-1,4-dihydro-4,4,6-trimethyl-	38
6246	-----, 1,4-dihydro-1,4,4,6-tetramethyl-	96
4047	-----, 1,4-dihydro-4,4,6-trimethyl-	93
6467	-----, 1,4-dihydro-4,4,6-trimethyl-1-phenyl-	78
6463	-----, 1,4-dihydro-4,4,6-trimethyl-1-o-tolyl-	30
6247	-----, 1,1'-p-phenylenebis[1,4-dihydro-4,4,6-trimethyl-	29
3657	2(1H)-Pyrimidinethione, 5,6-dihydro-4,6-dimethyl-6-thioureido-	85
6462	-----, 3,4-dihydro-4,4,6-trimethyl-1-(1-naphthyl)-	27
6464	-----, 1,1'-m-phenylenebis[3,4-dihydro-4,4,6-trimethyl-	3
5149	Urea, 1-allyl-3-dodecyl-2-thio-	93
5150	-----, 1-allyl-3-octadecyl-2-thio-	46
3306	-----, 1-allyl-2-thio-	98
6468	-----, 1,1'-(4,4'-biphenylylene)bis[2-thio-	4
6402	-----, 1-(2-biphenylyl)-2-thio-	(T)
5736	-----, 1-butyl-3-dodecyl-2-thio-	48
5950	-----, 1-tert-butyl-3-(1,2,3,4,4a,9a-hexahydro-1,4-methanofluoren-2-yl)-2-thio-	77
4534	-----, 1-coco-2-thio-	100
5449	-----, 1-cyclohexyl-3-ethyl-2-thio-	96
3180	-----, 1,3-di(2-biphenylyl)-2-thio-	52
4707	-----, 1,3-didodecyl-2-thio-	62
2780	-----, 1,3-diethyl-2-thio-	94
2778	-----, 1,1-dimethyl-2-thio-	75
3361	-----, 1,3-di(1-naphthyl)-2-thio-	42
6245	-----, 1,3-di(2-naphthyl)-2-thio-	74
5735	-----, 1-dodecyl-3-ethyl-2-thio-	73

TABLE I

Code No.	Classification and Name	K Value
	THIOUREAS	
	Unsubstituted	
5734	Urea, 1-dodecyl-3-methyl-2-thio-	84
4706	-----, 1-dodecyl-3-phenyl-2-thio-	99
4232	-----, 1-dodecyl-2-thio-	100
4533	technical grade	100
2781	-----, 1,1'-ethylenebis[3-ethyl-2-thio-	72
2779	-----, 1-ethyl-2-thio-	82
2777	-----, 1-methyl-2-thio-	76
5148	-----, 1-octadecyl-3-phenyl-2-thio-	79
5448	-----, 1,1'-(p-phenylene)bis[2-thio-	34
2782	-----, 1,1'-tetramethylenebis[3-ethyl-2-thio-	42
3601	-----, 2-thio-, hydrochloride	80
	Monosubstituted	
	Acids	
5258	Acetic acid, (2-imino-4-oxo-5-thiazolidinyl)-	-5
3639	-----, (5-pseudothiohydantoinyl)-	-45
3850	salt with cyclohexylamine	78
3849	salt with dicyclohexylamine	83
3848	salt with hexadecylamine	58
3468	sodium salt	5
	Alcohols	
5658	Ethanol, 2-[(2-imidazolinyl)thio]-, hydrochloride	74
5632	Pseudourea, 2-[(2-hydroxyethyl)thio]-, complex with ethylene glycol and hydrochloric acid	82
2783	Urea, 1-ethyl-3-(2-hydroxyethyl)-2-thio-	81
	Amides	
5648	Acetamide, 2-[(2-imidazolin-2-yl)thio]-, picrate	96
5635	2-Pseudoureaacetamide, 2-thio-, hydrochloride	60
3484	2-Pseudoureapropionamide, 2-thio-, hydrochloride	40
	Amines	
5520	Pseudourea, 2-(2-aminoethyl)-2-thio-, dihydrobromide	92
7215	-----, 2-[(diethylamino)ethyl]-2-thio-, dihydrochloride	88
5704*	-----, 2-[2-(dimethylamino)ethyl]-2-thio-, dihydrochloride	98
	Esters	
3467	Acetic acid, (5-pseudothiohydantoinyl)-, 2-ethylhexyl ester	25

TABLE I

Code No.	Classification and Name	K Value
	THIOUREAS	
	Monosubstituted	
	Esters	
5634	Pseudourea, 2-ethoxycarbonyl-2-thio-, picrate	98
3707	4-Thiazolecarboxylic acid, 2-amino-, ethyl ester	55
	Ethers	
5123, 5396	Benzothiazole, 2-amino-5,6-dimethoxy-	100, 100
3366	-----, 2-(p-methoxyanilino)-	10
5654	Ether, bis[2-[(1-propionyl-2-imidazolin-2-yl)thio]-ethyl]	70
4750	2-Imidazoline, 2,2'-ethylenebis(oxyethylenethio)di-, dihydrochloride	71
5431	-----, 1-(methoxymethyl)-2-(methoxymethylthio)-	50
5657	-----, 2-[[2-[2-(p-octylphenoxy)ethoxy]ethyl]thio]-, hydrochloride	85
5656	-----, 2-[[2-(2-phenoxyethoxy)ethyl]thio]-	76
5707	Pseudourea, 1,2-dimethyl-2-thio-1-(2-vinyloxy-ethyl)-, hydroiodide	99
4748	-----, 2-[2-[p-(1,1,3,3-tetramethylbutyl)phenoxy]-ethyl]-2-thio-, hydrobromide	100
	Halides	
5642*	2-Imidazoline, 2-[(o-chlorobenzyl)thio]-, hydrochloride	98
5643*	-----, 2-[(p-chlorobenzyl)thio]-, hydrochloride	97
5650	-----, 2-[(2,4-dichlorobenzyl)thio]-, picrate	89
5645	-----, 2-[(3,4-dichlorobenzyl)thio]-, 3,4-dichloro-phenylsulfinate	98
5646	fluosilicate	66
5649	picrate	93
5644	thiocyanate	89
5451	Pseudourea, 2-(p-chlorobenzyl)-2-thio-, hydrobromide	95
5623	-----, 2-(2,4-dichlorobenzyl)-2-thio-, complex with crotonic acid	100
5625*	complex with 3,5-dichlorophenoxyacetic acid	99
5249	hydrochloride	97
5636	-----, 2-(3,4-dichlorobenzyl)-1,1-diphenyl-2-thio-, hydrochloride	60
5622	-----, 2-(3,4-dichlorobenzyl)-2-thio-, complex with formic acid	92
5626*	complex with 2-furoic acid	99
5624	complex with heptanoic acid	100
5627*	-----, 2-(3,4-dichlorophenyl)-2-thio-, complex with 1,2-ethanebis(thiocarbamic acid)	92
7089	-----, 2-pentachlorobenzyl-2-thio-, hydrochloride	98

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Code No.	Classification and Name	K Value
	THIOUREAS	
	Monosubstituted	
	Halides	
7095	Urea, 1-(p-chlorophenyl)-3-methyl-2-thio-	100
5486	-----, 1-(m-chlorophenyl)-2-thio-	100
	Sulfonic Acids	
6414	1,5-Naphthalenedisulfonic acid, 4-(2-mercapto-4,4,6-trimethyl-1(4H)-pyrimidinyl)-	59
6413	2-Naphthalenesulfonic acid, 5-(2-mercapto-4,4,6-trimethyl-1(4H)-pyrimidinyl)-	23
6412	m-Toluenesulfonic acid, 6-(2-mercapto-4,4,6-trimethyl-1(4H)-pyrimidinyl)-	50
	Miscellaneous	
6451	Carbamic acid, dithio-, [2-(2-thioxoimidazolidin-1-yl)-ethyl]-, sodium salt, trihydrate	71
5250	Hydantoin, 5,5-dimethyl-2,4-dithio-	99
5455	2-Imidazolidinethione, 1-methyldithiocarbonyl-	91
5995	Pseudourea, 2-(1,2,3,4-tetrahydro-2,4-dioxo-5-pyrimidinyl)-2-thio-, hydrochloride	44
5705	-----, 2,2'-(thiodimethylene)bis[2-thio-, dihydrochloride	97
7121	4-Thiazolidinone, 5-ethyl-2-imino-	73
3038	-----, 2-imino-	76
3039	-----, 3-phenyl-2-phenylimino-	-13
5345	4-Thiazolidone, 3-butyl-2-butylimino-	99
6403	Urea, 1,3-di(2-pyridyl)-2-thio-	96
	Polysubstituted	
5659	Carbamic acid, thio-, 2-[2-(octadecylthio)-2-imidazolin-1-yl]ethyl-, 3,4-dichlorobenzyl ester, hydrobromide	35
5695	Ethanol, 2-(2,6-diamino-s-triazin-4-ylthio)-	46
5454	Glycolic acid, [(4,5-dihydro-2-imidazolythio]-, hydrochloride	48
5652	2-Imidazoline, 2-[(6-chloro-1,3-benzodioxan-8-yl)-methylthiol]-	76
5651	hydrochloride	89
5698	-----, 2-[2-(2-chloroethoxy)ethylthio]-	93
5430	hydrochloride	87
5660	-----, 1-[2-(3,4-dichlorobenzenesulfonamido)ethyl]-2-[(3,4-dichlorobenzyl)thio]-	54
5647	Imidazole, 4,5-dihydro-1-(2-aminoethyl)-2-[(3,4-dichlorobenzyl)thio]-, dihydrochloride	88
5036	5-Pyrimidinecarboxylic acid, 1,2,3,4-tetrahydro-4-oxo-2-thioxo-, ethyl ester	88

TABLE I

Code No.	Classification and Name	K Value
	THIOUREAS	
	Polysubstituted	
5552	d-Thioneine	12
4490	s-Triazine, 2,2'-[oxybis(ethylenethio)]bis[4,6-diamino-	25
6411	Urea, 1-(1,1-dimethyl-3-oxobutyl)-3-(p-nitrophenyl)-2-thio-	78
6410*	-----, 3-(2-hydroxyethyl)-1-(1,1-dimethyl-3-oxobutyl)-2-thio-	98
	THIURAMS	
5452	Disulfide, bis[(2-acetamidoethyl)thiocarbamoyl]	66
3179	-----, bis(cyclohexylmethylthiocarbamoyl)	50
3955	-----, bis(diethylthiocarbamoyl)	91
3041, 4208		100, 100
4537, 7290	-----, bis(dimethylthiocarbamoyl)	100, 83
4039	-----, bis(isopropylmethylthiocarbamoyl)	99
3217	-----, N,N'-ethylenebis[(2-cyanoethyl)thiocarbamoyl]	43
3220	-----, N,N'-ethylenebis[N-cyclohexylthiocarbamoyl]	49
3677	Sulfide, bis(cyclohexylmethylthiocarbamoyl)	12
7296*	-----, bis(dibutylthiocarbamoyl)	84
4049	-----, bis(dicyclohexylthiocarbamoyl)	99
3676	-----, bis(1-piperidylthiocarbonyl)	68
4076	Trisulfide, bis(dimethylthiocarbamoyl)	100
3653	-----, bis(morpholinothiocarbonyl)	34
	TIN COMPOUNDS	
6971	Carbamic acid, dibutyldithio-, dibutyltin(IV) salt	78
6972	Isooctyl phosphate, dibutyltin	60
6970	Tin, bis(butylthio)didodecyl-	56
6372*	-----, dibutyldifluoro-	99
6376*	-----, dibutyloxo-	90
6969*	-----, dibutylthioxo-	100
6975	-----, dichlorodi(4-morpholinobutyl)-	(T)
5998	-----, difluorodimethyl-	98
6954	-----, tetracyclohexyl-	40
6963	-----, tetraphenyl-	5
	UREAS	
	Unsubstituted	
4665	Carbanilide, N,N'-diethyl-	84
3267	-----, 2,2',4,4',6,6'-hexaethyl-	-28

TABLE I

Code No.	Classification and Name	K Value
	UREAS	
	Unsubstituted	
4324	Glycoluril	27
6398	2-Imidazolidinone, 1,3-bis(3,5,5-trimethylhexyl)-	89
4325	2-Imidazolidone	48
4467	2(3H)-Imidazolone, 4,5-diphenyl-	100
4704, 5873	2,4(1H,3H)-Quinazolinedione	83, 84
7166	-----, 3-butyl-	92
3330	Urea, compound with ¼ f. wt. boron trifluoride	5
3464	dihydrogen phosphate	74
5875	-----, 3-allyl-1,1-dimethyl-	95
3299	-----, 1-allyl-3-phenyl-	86
7139	-----, 1-benzyl-3-triphenylmethyl-	33
6448	-----, 1,3-bis(1,1,3,3-tetramethylbutyl)-	3
5446	-----, 1-cyclohexyl-3-(2-ethylhexyl)-	57
5447	-----, 1,1'-(m-phenylene)bis[3,3-dimethyl-	18
	Monosubstituted	
	Acids	
6752	Maleamic acid, N-carbamoyl-	53
5012	5-Pyrimidinecarboxylic acid, 1,2,3,4-tetrahydro-2,4-dioxo-, monohydrate	33
	Alcohols	
4327	Glycoluril, 1,3,4,6-tetrakis(hydroxymethyl)-	57
6396	2-Imidazolidinone, 1-(2-hydroxyethyl)-	-37
	Amines	
5794	Hydantoin, 1-amino-, monohydrochloride	87
6397	2-Imidazolidinone, 1-(2-aminoethyl)-	6
2911	Uracil, 6-amino-	28
2912	-----, 5,6-diamino-, salt with ½ f. wt. sulfuric acid	27
4942	Urea, cyclohexylaminomethyl-	84
	Esters	
6747	Fumaramic acid, N-carbamoyl-, methyl ester	82
6746	Maleamic acid, N-carbamoyl-, dodecyl ester	19
6742	methyl ester	84
6749	-----, N-(tert-butylcarbamoyl)-, isopropyl ester	87
6748	methyl ester	79
	Ethers	
4300	Carbanilide, 2-methoxy-	45
4476	2-Imidazolidone, 1,3-bis(methoxymethyl)-	21

TABLE I

Code No.	Classification and Name	K Value
	UREAS	
	Monosubstituted	
	Ethers	
4479	1,3,5,4H-Oxadiazin-4-one, 3,5-bis(butoxymethyl)-tetrahydro-	75
3271	Urea, (3-chloromercuri-2-methoxypropyl)-	69
	Halides	
5886	Carbanilide, 4,4'-dichloro-	-41
3453	Glycoluril, 1,3,4,6-tetrachloro-3a,6a-diphenyl-	64
5888	Hydantoin, 1,3-dibromo-5,5-dimethyl-	68
5885	-----, 1,3-dichloro-5,5-dimethyl-	97
5887	Urea, (p-chlorophenyl)-	80
	Heterocyclic Compounds	
5947	Urea, 1-(3,5-diethyl-4H-1,2,4-triazol-4-yl)-3-p-tolyl-	56
5945	-----, 1-(3,5-dimethyl-4H-1,2,4-triazol-4-yl)-3-phenyl-	51
5112*	-----, 1-phenyl-3-(2-thiazolyl)-	99
5172	-----, 1H-tetrazol-5-yl-	32
	Miscellaneous	
4015	Allantoin	16
5276	Alloxan	40
5280	Alloxantin	33
6631	Barbituric acid, 5-ethyl-1-phenyl-	46
3544	Bis(acetoureidophenyl)iodonium iodide	69
6645	Hydantoin, 5-phenyl-5-(phenylthiomethyl)-	73
5994	Isobarbituric acid, 5-thio-	47
7102	Isocyanuric acid, triphenyl-	88
7220	Phenacylurea	-116
5995	Pseudourea, 2-(1,2,3,4-tetrahydro-2,4-dioxo-5-pyrimidinyl)-2-thio-, hydrochloride	44
2981	Urea, amidino-, monosulfate	82
5757	-----, 1-(p-hydroxyphenyl)-1-methyl-3-phenyl-	38
	Polysubstituted	
6743	Fumaramic acid, N-carbamoyl-, 2-chloroethyl ester	65
6744	2-nitrobutyl ester	57
2910	Hydrouracil, 6-imino-5-isonitroso-	-35
3459	Isocyanuric acid, trichloro-	97
6758	Maleamic acid, N-carbamoyl-, 2-hydroxyethyl ester	52
6745	2-(p-octylphenoxy)ethyl ester	74
7110	Semicarbazide, 1-(p-chlorobenzoyl)-	18
6757	Succinamic acid, N-(tert-butylcarbamoyl)-2(or 3)-sulfo-, sodium salt, dodecyl ester	56

TABLE I

Code No.	Classification and Name	K Value
	UREAS	
	Polysubstituted	
6756	Succinamic acid, N-(tert-butylcarbamoyl)-2(or 3)-sulfo-, sodium salt, isopropyl ester	43
6755	methyl ester	66
6754	-----, N-carbamoyl-2(or 3)-sulfo-, sodium salt, dodecyl ester	-16
6753	methyl ester	-27
5891	Urea, 3,3-bis(2-hydroxyethyl)-1-(m-chlorophenyl)-	44
5918	-----, 1,1-bis(2-hydroxyethyl)-3-(m-chlorophenyl)-, bis(m-chlorocarbanilate)	36
2994	-----, 1,3-bis(2,2,2-trichloro-1-hydroxyethyl)-	37
2993	-----, 1-(2,2,2-trichloro-1-hydroxyethyl)-	36
5890	-----, 3-(2,2,2-trichloro-1-hydroxyethyl)-1-m-tolyl-	62
	ZINC COMPOUNDS	
4054	2-Benzimidazolethiol, zinc derivative	92
3921, 7286	2-Benzothiazolethiol, zinc derivative	-35, 0
3906	Carbamic acid, N-(2-cyanoethyl)-N-ethyldithio-, zinc salt	74
7287	-----, dibenzyldithio-, zinc salt	47
7288	-----, dimethyldithio-, zinc salt	83
3057	-----, ethylenebis[N-(2-cyanoethyl)dithio-, zinc salt	70
3221	-----, N,N'-ethylenebis[N-butyldithio-, zinc salt	22
5949	-----, (3,5,5-trimethylhexyl)dithio-, zinc salt	91
2761	Nicotine, compound with 2 f. wt. zinc oxalate and 1 f. wt. oxalic acid, pentahydrate	94
2769	compound with ½ f. wt. zinc salicylate and 1 f. wt. salicylic acid, monohydrate	79
2774	compound with ½ f. wt. zinc thiocyanate	96
2773	compound with 1 f. wt. zinc thiocyanate and 1 f. wt. thiocyanic acid	89
3500	Phenol, pentachloro-, zinc derivative	91
3907	Phthalic acid, zinc salt	35
6511	6H-1,3-Thiazine-2-thiol, 4,6,6-trimethyl-, zinc derivative	97
6466	Xanthic acid, sec-butyl-, zinc salt	33
6390	-----, cyclohexyl-, zinc salt	56
6241	-----, ethyl-, zinc salt	-17
6243	-----, isopropyl-, zinc salt	-6

TABLE I

Code No.	Classification and Name	K Value
	MISCELLANEOUS, UNIDENTIFIED AND UNKNOWN STRUCTURES	
4210	Alkazene 42	39
7007*	2-Alkenyl-1-(2-hydroxyethyl)-2-imidazoline, hydrogenated	99
4518	Alkylamine, bentonite-18	35
4519	-----, bentonite-34	44
6021	Amicetin	41
7230	Amine D, disalt with fatty acids	74
4691	Animal Repellent BA-1	18
5210-S	Animal Repellent (skunk oil preparation)	88
6778	Animal Repellent 138	47
3861	Aureothricin, dried broth	90
4473	Benzaldehyde, 2,4-bis(dichloropolyvinyl)-	28
6999	1(and 3)-Benzyl-2-[(x-heptadecenyl) and (x,x-heptadecadienyl)]-1-(2-hydroxyethyl)-2-imidazolium chloride, mixture, 60 percent in isopropyl alcohol	94
4514	Bis(2-hydroxyethyl)dodecylamine, addition compound with boron trifluoride, bentonite	51
4515	Bis(2-hydroxyethyl)tetradecylamine, addition compound with boron trifluoride, bentonite	13
6679	N-Butylmaleinimide, polymer	29
6813	Carbamic acid, dithio-, N-[2-(disubstitutedamino)-ethyl]-, mixture	95
7302	CME 4765-109	(T)
4301	CP3438-(3)	97
3541	Cunimene #2243	80
3540	-----, #2246	92
6800	Cyanoethylated cyclicpolyamines, mixed	42
6804	Cyclicpolyamines, mixed	35
3539	De-Sol	-29
4806	Dibutylamine, sulfate, cellulose	54
7283	Dihydrazine sulfate, blend	81
3642	2,2"-Dithiobisbenzothiazole, reaction product with sulfur	-22
5137	DV-2567	100
6833	Furfurin	96
3125	G-8	86
7004*	2-[(x-heptadecenyl) and (x,x-heptadecadienyl)]-1-(2-hydroxyethyl)-2-imidazoline, mixture	93
2931, 2932	Hexachlorocylcopentadiene derivative	20, -44
2930	Hexachloropentadiene derivative	64
5566	Imidazoline, complex with cottonseed acids	52
5565	complex with tall oil acids	77
5567	complex with tallow acids	72
7107*	Imitation Honey	37

TABLE I

Code No.	Classification and Name	K Value
	MISCELLANEOUS, UNIDENTIFIED AND UNKNOWN STRUCTURES	
6683	Isopropyl fumarate, polymer with N-isopropylmaleinimide	46
5197	Isosafrole, octyl sulfoxide of	81
4516	Laurylamine, addition compound with boron trifluoride, bentonite	50
4517	addition compound with boron trifluoride(?), bentonite	49
4511	Laurylammonium-----(?), bentonite	11
6517	Lignin, arsenic derivative	50
6518	-----, chlorinated	20
6514	-----, copper salt	4
6516	-----, lead salt	54
6515	-----, mercury salt	7
6519	-----, phosphate	30
6520	-----, thiophosphate	26
7008	LJS-106	96
6777	Mentha rotundifolia	95
3640	2-Mercaptobenzothiazole, polymer with ethylene oxide(1:10), (Hibitite L)	63
6678	Methyl methacrylate, polymer with N-phenylmaleinimide	45
3126	MGK 264	56
4512	Myristylamine, addition compound with boron trifluoride, bentonite	22
4513	Myristylammonium-----(?), bentonite	42
4698	Naphthenylamine B, disalt with G-4	98
4697	monosalt with G-4	99
4699	monosalt with G-11	100
4700	salt with pentachlorophenol	98
7298	Naugawhite (hindered phenol)	17
4051	Netropsin, disulfate	43
3846	Phosphoramide polymer	69
3852	hydrolyzed	32
	Pigments	
6931	Alkali blue P, CP258 AB8219	-24
6930	Alkali blue R, CP812 AB8224	-4
6932	Alkali blue RRS, CP636 AB8225	24
6926	Alizarin maroon, RX10352 S-958	2
6927	Alizarin red, RX10132 S-954	25
6866	Arcturus red, CP1270 AB8147	29
6867	Arcturus red, CP1275 AB8148	1
6888	Benzidine orange, 12193 S-924	9
6899	Benzidine yellow anilide, 12190 S-906	45
6901	Benzidine yellow lemon, 12221 S-910	5
6896	Benzidine yellow lightfast, 12220 S-909	52
6903	Benzidine yellow medium, 12222 S-911	-10
6902	Benzidine yellow medium, RX12223 S-968	28

TABLE I

Code No.	Classification and Name	K Value
	MISCELLANEOUS, UNIDENTIFIED AND UNKNOWN STRUCTURES	
	Pigments	
6900	Benzidine yellow primrose, 12226 S-905	37
6897	Benzidine yellow toluidine, 12192 S-908	31
6898	Benzidine yellow trans. 12191 S-907	48
6874	Brilliant toning red, CP1200 AB8138	-16
6873	Brilliant toning red, CP1205 AB8137	-53
6871	Britone red M, CP873 AB8156	-5
6872	Britone red M, CP2102 AB8157	-112
6868	Britone red R, CP565 AB8142	-34
6869	Britone red R, CP2200 AB8143	-41
6870	Britone red Y, CP423 AB8151	-95
6840	Chrome green deep, RX11835 S-964	-79
6921	Chrome green light, RX11231 S-961	18
6920	Chrome green light, RX11825 S-960	-18
6919	Chrome green medium, RX11233 S-962	42
6848	Chrome green medium deep, RX11234 S-963	46
6850	Chrome orange deep, 12084 S-930	30
6849	Chrome orange extra deep, 12093 S-931	40
6914	Chrome orange light, 12311 S-912	52
6913	Chrome orange medium, 12082 S-913	-40
6904	Chrome yellow for green, 12160 S-925	-118
6907	Chrome yellow light, 12121 S-915	-7
6906	Chrome yellow light medium, 12163 S-926	-59
6910	Chrome yellow lightfast light, 12162 S-918	-60
6908	Chrome yellow lightfast primrose, 12161 S-917	-22
6905	Chrome yellow medium, 12096 S-916	-99
6909	Chrome yellow, primrose, 12074 S-914	-5
6876	Dearborn red deep, 10453 S-940	-16
6877	Dearborn red extra deep, 10467 S-941	51
6875	Dearborn red light, 10452 S-936	-39
6858	Dianisidine orange, 10406 S-929	8
6942	Fuchsines, CP204 AB8229	93
6943	Fuchsines special base, CP222 AB8228	78
6941	Graphic maroon, CP820 AB8200	-32
6892	Graphic red M, CP233 AB8153	10
6894	Graphic red M, CP802 AB8155	12
6893	Graphic red M, CP21000 AB8154	29
6895	Graphic red R, CP234 AB8158	15
6891	Graphic red Y, CP272 AB8150	-5
6863	Illini red, CP1264 AB8152	43
6878	Lake red C, CP845 AB8145	-41
6879	Lake red C, CP2301 AB8146	-65
6940	Microtex britone maroon, CP2203 AB8221	44
6884	Microtex rubanox red, CP2401 AB8132	-293

TABLE I

Code No.	Classification and Name	K Value
	MISCELLANEOUS, UNIDENTIFIED AND UNKNOWN STRUCTURES	
	Pigments	
6844	Molybdate orange, RX12095 S-932	5
6847	Molybdate orange deep, 12145 S-933	13
6846	Molybdate orange deep, 12155 S-920	-10
6845	Molybdate orange light, 12153 S-919	18
6929	Naphthol red-ITR type, RX10469 S-953	52
6857	Naphthol red deep, RX10460 S-951	-66
6853	Naphthol red light, RX10454 S-949	39
6928	Naphthol red light, RX10468 S-952	37
6854	Naphthol red medium, RX10455 S-950	49
6881	Parared deep, 10109 S-936	29
6880	Parared light, 10333 S-935	-45
6882	Permachlor red, 10382 S-938	-17
6939	Permachrom maroon, CP779 AB8222	28
6852	Permachrom red, CP1083 AB8139	46
6851	Permachrom red, CP1086 AB8140	58
6859	Permanent orange, 1333 S-922	49
6937	Permansa green, CP1236 AB8217	39
6938	Permansa green variant, CP1258 AB8218	-24
6861	Permansa orange, 1047 S-923	-73
6860	Permansa orange, 10369 S-921	-16
6862	Permansa red, 10361 S-937	-113
6912	Permansa yellow 10G, 12105 S-928	-150
6936	Permatoning violet, CP490 AB8230	21
6855	Plasticone red deep, RX10457 S-948	10
6883	Plasticone red, light, 10465 S-934	-202
6856	Plasticone red M. RX10464 S-947	-11
6890	Polaris red, CP1285 AB8136	26
6922	Pyrolux maroon, RX10411 S-959	-43
6935	Royal methyl violet, CP639 AB8231	-41
6933	Royal victoria blue, CP637 AB8227	97
6885	Rubanox red, CP368 AB8133	30
6886	Rubanox red, CP543 AB8141	-94
6842	Serene green, RX11206 S-967	8
6843	Shamrock green deep, RX11185 S-966	15
6841	Shamrock green light, RX11184 S-965	-51
6944	Solfast blue, 23100 AB8238	8
6838	Solfast blue M, 33100	-92
6839	Solfast green, 63100	-49
6865	Solfast red, CP780 AB8135	40
6864	Solfast red, CP967 AB8134	40
6934	Solfast victoria blue, CP476 AB8226	96
6887	Superior red, CP1442 AB8144	-55

TABLE I

Code No.	Classification and Name	K Value
	MISCELLANEOUS, UNIDENTIFIED AND UNKNOWN STRUCTURES	
	Pigments	
6924	Toluidine maroon deep, RX10393 S-956	-31
6925	Toluidine maroon deep, RX10458 S-957	-8
6923	Toluidine maroon light, RX10396 S-955	47
6915	Toluidine red, 10189 S-943	-26
6889	Toluidine red, 10298 S-942	16
6917	Toluidine red deep, 10395 S-945	-42
6916	Toluidine red extra deep, 10463 S-946	-32
6918	Toluidine red medium, 10461 S-944	2
6911	Zinc yellow, 12054 S-927	85
4106	l-Pimaric acid, addition product with maleic anhydride	96
6798	Polyethyleneimine	-9
4029	Quebracho, chlorinated(10.6 percent)	-29
2972	Quilon	65
5718	RA-63	34
3985	Rimocidin, sulfate, hydrate	73
3329	Rosinamine D, salt with zinc dimethyldithiocarbamate	96
2824	Starch, hexamethylenedicarbamate	-37
6684	Styrene, polymer with N-butylmaleinimide	43
6680	polymer with N-phenylmaleinimide (2:1)	45
3834	reaction product with sulfur	22
4123	p-Styrenesulfonic acid, sodium salt, polymer	-31
2732	Thanite	91
6498	Thiodan	(T)
7010	Thioneb	(T)
4535	Thiourea, complex with tallow acids	99
6949	Tributyltin, complex with resin acids	78
6781*	complex with tall oil acids	98
3728	Trinitrotoluene, condensation product with N,N-dimethyl-p-nitrosoaniline	-24
3178	Triton X-100	67
6499	V-C 3-103	94
6682	Vinyl chloride, polymer with N-butylmaleinimide	68
6681	polymer with N-isopropylmaleinimide	7
6685	x-Vinylpyridine, polymer with N-isopropylmaleinimide	59
2973	Volan	40

TABLE II

ACTIVITY OF SUBSTITUTED OR UNSUBSTITUTED FUNCTIONAL GROUPS

Functional Group	Substituent	No. Tested	$\bar{K}$	CV	No. K's >84	Repellency Index
ACID ANHYDRIDES	UNSUB	7	36	109	1	.03
ACID ANHYDRIDES	SUB	12	37	113	1	.03
ACID HALIDES	SUB	1	87	0	1	99.99
ACIDS, CARBOXYLIC	UNSUB MONOBASIC	27	38	99	2	.06
ACIDS, CARBOXYLIC	UNSUB POLYBASIC	22	42	99	1	.04
ACIDS, CARBOXYLIC	MONOSUB ALCOHOLS	8	55	59	3	.23
ACIDS, CARBOXYLIC	MONOSUB AMIDES	16	58	30	1	.16
ACIDS, CARBOXYLIC	MONOSUB AMINES	8	26	250	1	.01
ACIDS, CARBOXYLIC	MONOSUB ESTERS	3	84	16	1	.44
ACIDS, CARBOXYLIC	MONOSUB ETHERS	10	52	73	2	.12
ACIDS, CARBOXYLIC	MONOSUB HALIDES	17	41	86	2	.08
ACIDS, CARBOXYLIC	MONOSUB HETEROCYCLIC COMPOUNDS	14	33	122	0	.00
ACIDS, CARBOXYLIC	MONOSUB IMIDES	3	36	154	0	.00
ACIDS, CARBOXYLIC	MONOSUB IODONIUM COMPOUNDS	2	32	125	0	.00
ACIDS, CARBOXYLIC	MONOSUB KETONES	10	38	50	0	.00
ACIDS, CARBOXYLIC	MONOSUB LACTAMS	3	33	99	0	.00
ACIDS, CARBOXYLIC	MONOSUB NITRO COMPOUNDS	4	38	87	0	.00
ACIDS, CARBOXYLIC	MONOSUB PHENOLS	11	56	47	2	.20
ACIDS, CARBOXYLIC	MONOSUB THIOCARBAMATES	2	82	1	0	.00
ACIDS, CARBOXYLIC	MONOSUB THIOUREAS	6	29	162	0	.00
ACIDS, CARBOXYLIC	MONOSUB UREAS	2	43	23	0	.00
ACIDS, CARBOXYLIC	MONOSUB MISCELLANEOUS	8	56	72	3	.19
ACIDS, CARBOXYLIC	DISUB AMIDE-HALIDES	3	85	5	2	2.83
ACIDS, CARBOXYLIC	DISUB AMIDE-HETEROCYCLIC COMPOUNDS	2	71	17	0	.00
ACIDS, CARBOXYLIC	DISUB AMIDE-NITRO COMPOUNDS	3	64	35	1	.15
ACIDS, CARBOXYLIC	DISUB ETHER-HALIDES	5	67	46	3	.36
ACIDS, CARBOXYLIC	DISUB HALIDE-HETEROCYCLIC COMPOUNDS	6	80	26	4	1.03
ACIDS, CARBOXYLIC	DISUB HALIDE-PHENOLS	4	95	4	4	7.92
ACIDS, CARBOXYLIC	DISUB HETEROCYCLIC-KETONES	2	48	54	0	.00
ACIDS, CARBOXYLIC	DISUB MISCELLANEOUS	25	47	53	1	.07
ACIDS, CARBOXYLIC	POLYSUB	3	61	45	2	.23
ALCOHOLS	UNSUB	36	56	45	2	.21
ALCOHOLS	MONOSUB ACIDS	8	55	59	3	.23
ALCOHOLS	MONOSUB AMIDES	18	53	69	4	.26
ALCOHOLS	MONOSUB AMINES	36	74	30	17	3.49
ALCOHOLS	MONOSUB CARBAMATES	13	31	120	0	.00
ALCOHOLS	MONOSUB ESTERS	3	58	39	1	.12
ALCOHOLS	MONOSUB ETHERS	8	49	79	0	.00
ALCOHOLS	MONOSUB HALIDES	14	59	41	3	.36
ALCOHOLS	MONOSUB HETEROCYCLIC COMPOUNDS	12	73	27	6	1.35
ALCOHOLS	MONOSUB IMIDES	5	74	22	1	.28
ALCOHOLS	MONOSUB KETONES	5	49	76	0	.00
ALCOHOLS	MONOSUB PHENOLS	2	86	8	1	.90
ALCOHOLS	MONOSUB QUATERNARY NITROGEN COMPOUNDS	9	71	48	5	.62

TABLE II

Functional Group	Substituent	No. Tested	$\bar{K}$	CV	No. K's >84	Repellency Index
ALCOHOLS	MONOSUB SULFONIC ACIDS	2	9	323	0	.00
ALCOHOLS	MONOSUB THIOCARBAMATES	2	37	143	1	.02
ALCOHOLS	MONOSUB THIOUREAS	3	79	4	0	.00
ALCOHOLS	MONOSUB UREAS	2	10	470	0	.00
ALCOHOLS	MONOSUB MISCELLANEOUS	6	55	87	2	.11
ALCOHOLS	DISUB AMIDE-HALIDES	3	86	13	2	1.10
ALCOHOLS	DISUB AMINE-ETHERS	4	92	4	4	7.67
ALCOHOLS	DISUB AMINE-HALIDES	13	81	18	5	1.87
ALCOHOLS	DISUB AMINE-PHENOLS	7	79	32	4	.82
ALCOHOLS	DISUB CARBAMATE-HALIDES	2	89	57	1	.13
ALCOHOLS	DISUB ETHER-HALIDES	3	74	18	1	.34
ALCOHOLS	DISUB ETHER-QUATERNARY NITROGENS	2	10	870	1	<0.01
ALCOHOLS	DISUB HALIDE-HETEROCYCLIC COMPOUNDS	3	95	2	3	11.82
ALCOHOLS	DISUB HALIDE-NITRO COMPOUNDS	4	73	42	3	.43
ALCOHOLS	DISUB HALIDE-PHENOLS	3	77	12	1	.53
ALCOHOLS	DISUB HALIDE-PHOSPHORUS COMPOUNDS	2	86	0	2	99.99
ALCOHOLS	DISUB HALIDE-QUAT. NITROGEN COMPOUNDS	5	96	4	5	10.00
ALCOHOLS	DISUB HALIDE-UREAS	4	45	23	0	.00
ALCOHOLS	DISUB HETEROCYCLIC-KETONES	2	9	55	0	.00
ALCOHOLS	DISUB MISCELLANEOUS	30	61	54	9	.85
ALCOHOLS	POLYSUB	26	71	39	10	1.52
ALDEHYDES	UNSUB	6	69	31	2	.37
ALDEHYDES	MONOSUB ETHERS	3	30	77	0	.00
ALDEHYDES	MONOSUB NITRO COMPOUNDS	2	63	18	0	.00
ALDEHYDES	MONOSUB MISCELLANEOUS	3	53	32	0	.00
ALDEHYDES	POLYSUB	8	78	26	4	1.00
AMIDES	UNSUB MONOBASIC ACIDS	150	69	50	67	7.70
AMIDES	UNSUB POLYBASIC ACIDS	21	18	244	0	.00
AMIDES	MONOSUB ACIDS	16	58	30	1	.16
AMIDES	MONOSUB ALCOHOLS	18	53	69	4	.26
AMIDES	MONOSUB AMINES	7	85	14	5	2.53
AMIDES	MONOSUB AZO COMPOUNDS	2	71	1	0	.00
AMIDES	MONOSUB ESTERS	15	46	49	1	.08
AMIDES	MONOSUB ETHERS	58	62	41	9	1.13
AMIDES	MONOSUB HALIDES	90	64	41	29	3.77
AMIDES	MONOSUB HETEROCYCLIC COMPOUNDS	28	75	34	15	2.76
AMIDES	MONOSUB HYDRAZIDES	3	96	3	3	8.00
AMIDES	MONOSUB IMIDES	5	66	26	2	.42
AMIDES	MONOSUB IMINES	2	52	22	2	.39
AMIDES	MONOSUB IODONIUM COMPOUNDS	1	20	0	0	99.99
AMIDES	MONOSUB KETONES	17	35	199	4	.06
AMIDES	MONOSUB NITRILES	6	56	54	2	.17
AMIDES	MONOSUB NITRO COMPOUNDS	36	71	45	21	2.76
AMIDES	MONOSUB PHENOLS	13	52	60	3	.22
AMIDES	MONOSUB THIOUREAS	3	65	35	1	.15
AMIDES	MONOSUB MISCELLANEOUS	14	55	53	2	.17
AMIDES	DISUB ACID-HALIDES	3	85	5	2	2.83

TABLE II

Functional Group	Substituent	No. Tested	$\bar{K}$	CV	No. K's >84	Repellency Index
AMIDES	DISUB ACID-HETEROCYCLIC COMPOUNDS	2	71	17	0	.00
AMIDES	DISUB ACID-NITRO COMPOUNDS	3	64	35	1	.15
AMIDES	DISUB ALCOHOL-HALIDES	3	86	13	2	1.10
AMIDES	DISUB AMINE-ETHERS	2	86	13	1	.55
AMIDES	DISUB AMINE-HALIDES	2	81	18	1	.37
AMIDES	DISUB AMINE-HETEROCYCLIC COMPOUNDS	3	26	86	0	.00
AMIDES	DISUB AZO-HALIDES	2	21	21	0	.00
AMIDES	DISUB ESTER-HALIDES	2	54	35	0	.00
AMIDES	DISUB ESTER-NITRILES	2	22	168	0	.00
AMIDES	DISUB ETHER-HALIDES	22	23	254	1	.01
AMIDES	DISUB ETHER-NITRO COMPOUNDS	4	72	27	2	.44
AMIDES	DISUB ETHER-PHENOLS	2	26	3	0	.00
AMIDES	DISUB HALIDE-KETONES	2	68	5	0	.00
AMIDES	DISUB HALIDE-NITRO COMPOUNDS	10	53	33	1	.13
AMIDES	DISUB HALIDE-PHENOLS	27	86	20	20	7.17
AMIDES	DISUB HETEROCYCLIC-NITRO COMPOUNDS	3	96	1	3	24.00
AMIDES	DISUB MISCELLANEOUS	31	44	92	6	.24
AMIDES	POLYSUB	9	76	33	4	.77
AMIDINES	SUB	5	80	11	2	1.21
AMINE OXIDES	UNSUB	1	42	0	0	99.99
AMINES	UNSUB PRIMARY	62	84	23	43	13.09
AMINES	UNSUB SECONDARY	32	82	23	21	6.24
AMINES	UNSUB TERTIARY	34	76	37	21	3.59
AMINES	UNSUB MIXED	7	87	8	5	4.53
AMINES	MONOSUB ACIDS	8	26	250	1	.01
AMINES	MONOSUB ALCOHOLS	36	74	30	17	3.49
AMINES	MONOSUB AMIDES	7	85	14	5	2.53
AMINES	MONOSUB AZO COMPOUNDS	2	20	366	1	<0.01
AMINES	MONOSUB CARBAMATES	3	76	18	1	.35
AMINES	MONOSUB ESTERS	5	63	20	0	.00
AMINES	MONOSUB ETHERS	17	76	33	7	1.34
AMINES	MONOSUB HALIDES	14	83	23	7	2.11
AMINES	MONOSUB HETEROCYCLIC COMPOUNDS	59	73	40	29	4.41
AMINES	MONOSUB HYDRAZINES AND DERIVATIVES	2	53	20	0	.00
AMINES	MONOSUB HYDROXYLAMINES	3	42	129	1	.03
AMINES	MONOSUB IMIDES	9	46	63	1	.06
AMINES	MONOSUB IMINES	2	76	29	1	.22
AMINES	MONOSUB KETONES	12	72	28	4	.86
AMINES	MONOSUB LACTAMS	2	67	13	0	.00
AMINES	MONOSUB LACTONES	2	-120	-99	0	.00
AMINES	MONOSUB NITRILES	17	72	40	9	1.35
AMINES	MONOSUB NITRO COMPOUNDS	10	71	30	4	.79
AMINES	MONOSUB NITROSO COMPOUNDS	2	91	8	1	.95
AMINES	MONOSUB PHENOLS	16	77	34	8	1.51
AMINES	MONOSUB SULFONES	3	34	117	0	.00
AMINES	MONOSUB SULFONIC ACIDS	6	14	511	0	.00
AMINES	MONOSUB THIOCARBAMATES	3	78	22	1	.30

TABLE II

Functional Group	Substituent	No. Tested	$\bar{K}$	CV	No. K's >84	Repellency Index
AMINES	MONOSUB THIOUREAS	3	93	4	3	5.81
AMINES	MONOSUB UREAS	5	46	70	1	.05
AMINES	MONOSUB MISCELLANEOUS	5	16	491	1	0.01
AMINES	DISUB ALCOHOL-ETHERS	4	92	4	4	7.67
AMINES	DISUB ALCOHOL-HALIDES	13	81	18	5	1.87
AMINES	DISUB ALCOHOL-PHENOLS	7	79	32	4	.82
AMINES	DISUB AMIDE-ETHERS	2	86	13	1	.55
AMINES	DISUB AMIDE-HALIDES	2	81	18	1	.37
AMINES	DISUB AMIDE-HETEROCYCLIC COMPOUNDS	3	26	86	0	.00
AMINES	DISUB ETHER-HALIDES	2	96	0	2	99.99
AMINES	DISUB ETHER-HETEROCYCLIC COMPOUNDS	11	89	11	9	6.07
AMINES	DISUB ETHER-IMIDES	2	32	121	0	.00
AMINES	DISUB ETHER-NITRILES	3	92	7	2	2.19
AMINES	DISUB ETHER-NITRO COMPOUNDS	4	78	6	0	.00
AMINES	DISUB HALIDE-HETEROCYCLIC COMPOUNDS	9	75	39	4	.64
AMINES	DISUB HALIDE-IMIDES	3	39	6	9	.00
AMINES	DISUB HALIDE-KETONES	4	62	32	1	.16
AMINES	DISUB HALIDE-NITRILES	2	77	7	0	.00
AMINES	DISUB HALIDE-NITRO COMPOUNDS	3	78	16	2	.81
AMINES	DISUB HALIDE-QUAT. NITROGEN COMPOUNDS	3	95	5	3	4.75
AMINES	DISUB HALIDE-SULFONES	2	76	6	0	.00
AMINES	DISUB HETEROCYCLIC-KETONES	3	55	20	0	.00
AMINES	DISUB HETEROCYCLIC-NITRILES	5	35	93	1	.03
AMINES	DISUB KETONE-PHENOLS	2	50	26	0	.00
AMINES	DISUB NITRILE-PHENOLS	2	66	12	0	.00
AMINES	DISUB MISCELLANEOUS	37	60	53	11	1.04
AMINES	POLYSUB	38	68	53	17	1.82
ANTIMONY COMPOUNDS	MIXED	3	18	160	0	.00
ARSENIC COMPOUNDS	MIXED	13	77	44	6	.88
AZO AND AZOXY COMPOUNDS	MIXED	10	54	87	4	.21
BISMUTH COMPOUNDS	MIXED	3	35	161	0	.00
BORON COMPOUNDS	MIXED	36	71	45	18	2.37
CARBAMATES	UNSUB	64	72	29	18	3.72
CARBAMATES	MONOSUB ALCOHOLS	13	31	120	0	.00
CARBAMATES	MONOSUB AMINES	3	76	18	1	.35
CARBAMATES	MONOSUB ESTERS	5	61	16	0	.00
CARBAMATES	MONOSUB ETHERS	6	62	18	0	.00
CARBAMATES	MONOSUB HALIDES	51	69	35	17	2.79
CARBAMATES	MONOSUB HETEROCYCLIC COMPOUNDS	18	78	13	7	3.50
CARBAMATES	MONOSUB NITRILES	4	71	12	1	.49
CARBAMATES	MONOSUB NITRO COMPOUNDS	7	77	23	4	1.12
CARBAMATES	MONOSUB MISCELLANEOUS	3	69	11	0	.00
CARBAMATES	DISUB ALCOHOL-HALIDES	2	89	57	1	.13
CARBAMATES	DISUB ESTER-HALIDES	4	82	7	1	.98
CARBAMATES	DISUB ETHER-HALIDES	5	79	12	1	.55
CARBAMATES	DISUB HALIDE-NITRILES	2	68	22	0	.00
CARBAMATES	DISUB PHENOL-QUINONES	2	-42	-10	0	.00

TABLE II

Functional Group	Substituent	No. Tested	$\bar{K}$	CV	No. K's >84	Repellency Index
CARBAMATES	DISUB MISCELLANEOUS	6	71	25	2	.47
CARBAMATES	POLYSUB	3	62	17	0	.00
CARBOHYDRAZIDES	MIXED	2	77	29	1	.22
CARBONATES	MIXED	15	52	77	3	.17
COPPER COMPOUNDS	MIXED	29	69	61	14	1.32
ESTERS, CARBOXYLIC ACIDS	UNSUB MONOBASIC ACIDS	11	21	190	0	.00
ESTERS, CARBOXYLIC ACIDS	UNSUB POLYBASIC ACIDS	17	69	60	11	1.05
ESTERS, CARBOXYLIC ACIDS	MONOSUB ACIDS	3	84	16	1	.44
ESTERS, CARBOXYLIC ACIDS	MONOSUB ALCOHOLS	3	58	39	1	.12
ESTERS, CARBOXYLIC ACIDS	MONOSUB AMIDES	15	46	49	1	.08
ESTERS, CARBOXYLIC ACIDS	MONOSUB AMINES	5	63	20	9	.00
ESTERS, CARBOXYLIC ACIDS	MONOSUB CARBAMATES	5	61	16	0	.00
ESTERS, CARBOXYLIC ACIDS	MONOSUB ETHERS	6	26	169	0	.00
ESTERS, CARBOXYLIC ACIDS	MONOSUB HALIDES	12	67	81	6	.41
ESTERS, CARBOXYLIC ACIDS	MONOSUB HETEROCYCLIC COMPOUNDS	39	58	41	4	.47
ESTERS, CARBOXYLIC ACIDS	MONOSUB HYDRAZINES AND DERIVATIVES	4	89	13	3	1.71
ESTERS, CARBOXYLIC ACIDS	MONOSUB IMIDES	6	34	218	2	.03
ESTERS, CARBOXYLIC ACIDS	MONOSUB KETONES	8	27	160	1	.01
ESTERS, CARBOXYLIC ACIDS	MONOSUB LACTAMS	2	34	61	0	.00
ESTERS, CARBOXYLIC ACIDS	MONOSUB LACTONES	5	39	93	1	.03
ESTERS, CARBOXYLIC ACIDS	MONOSUB NITRILES	12	65	50	4	.43
ESTERS, CARBOXYLIC ACIDS	MONOSUB NITRO COMPOUNDS	5	65	36	2	.30
ESTERS, CARBOXYLIC ACIDS	MONOSUB QUAT. NITROGEN COMPOUNDS	3	80	23	2	.58
ESTERS, CARBOXYLIC ACIDS	MONOSUB SULFIDES	3	62	7	0	.00
ESTERS, CARBOXYLIC ACIDS	MONOSUB SULFONES	2	20	210	0	.00
ESTERS, CARBOXYLIC ACIDS	MONOSUB THIOCARBAMATES	4	83	12	2	1.15
ESTERS, CARBOXYLIC ACIDS	MONOSUB THIOCYANATES	6	82	13	2	1.05
ESTERS, CARBOXYLIC ACIDS	MONOSUB THIOUREAS	3	59	50	1	.10
ESTERS, CARBOXYLIC ACIDS	MONOSUB UREAS	5	70	36	1	.16
ESTERS, CARBOXYLIC ACIDS	MONOSUB MISCELLANEOUS	4	70	49	2	.24
ESTERS, CARBOXYLIC ACIDS	DISUB AMIDE-HALIDES	2	54	35	0	.00
ESTERS, CARBOXYLIC ACIDS	DISUB AMIDE-NITRILES	2	22	168	0	.00
ESTERS, CARBOXYLIC ACIDS	DISUB CARBAMATE-HALIDES	4	82	7	1	.98
ESTERS, CARBOXYLIC ACIDS	DISUB ETHER-HALIDES	8	60	38	0	.00
ESTERS, CARBOXYLIC ACIDS	DISUB ETHER-LACTONES	2	31	34	0	.00
ESTERS, CARBOXYLIC ACIDS	DISUB ETHER-PHENOLS	2	30	1	0	.00
ESTERS, CARBOXYLIC ACIDS	DISUB HALIDE-HETEROCYCLIC COMPOUNDS	14	80	52	11	1.41
ESTERS, CARBOXYLIC ACIDS	DISUB HALIDE-HYDRAZINES	3	67	25	1	.22
ESTERS, CARBOXYLIC ACIDS	DISUB HALIDE-KETONES	2	53	11	0	.00
ESTERS, CARBOXYLIC ACIDS	DISUB HALIDE-NITRO COMPOUNDS	3	43	73	1	.05
ESTERS, CARBOXYLIC ACIDS	DISUB HALIDE-SULFIDES	2	85	5	1	1.42
ESTERS, CARBOXYLIC ACIDS	DISUB HALIDE-THIOCARBAMATES	3	85	13	1	.54
ESTERS, CARBOXYLIC ACIDS	DISUB HETEROCYCLIC-NITRO COMPOUNDS	12	86	13	9	4.96
ESTERS, CARBOXYLIC ACIDS	DISUB SULFONIC ACID-UREAS	5	24	157	0	.00
ESTERS, CARBOXYLIC ACIDS	DISUB MISCELLANEOUS	27	58	38	5	.64
ESTERS, CARBOXYLIC ACIDS	POLYSUB	14	62	40	3	.39
ETHERS	UNSUB	11	44	79	2	.09

TABLE II

Functional Group	Substituent	No. Tested	$\bar{K}$	CV	No. K's >84	Repel-lency Index
ETHERS	MONOSUB ACID ANHYDRIDES	2	-44	-18	0	.00
ETHERS	MONOSUB ACIDS	10	52	73	2	.12
ETHERS	MONOSUB ALCOHOLS	8	49	79	0	.00
ETHERS	MONOSUB ALDEHYDES	3	30	77	0	.00
ETHERS	MONOSUB AMIDES	58	62	41	9	1.13
ETHERS	MONOSUB AMINES	17	76	33	7	1.34
ETHERS	MONOSUB CARBAMATES	6	62	18	0	.00
ETHERS	MONOSUB ESTERS	6	26	169	0	.00
ETHERS	MONOSUB HALIDES	16	67	27	4	.83
ETHERS	MONOSUB HETEROCYCLIC COMPOUNDS	16	70	29	4	.80
ETHERS	MONOSUB HYDRAZIDES	2	24	270	1	.01
ETHERS	MONOSUB IMIDES	6	-15	-199	0	.00
ETHERS	MONOSUB KETONES	8	54	52	1	.09
ETHERS	MONOSUB LACTONES	4	28	68	0	.00
ETHERS	MONOSUB NITRILES	6	83	12	3	1.73
ETHERS	MONOSUB NITRO COMPOUNDS	18	72	26	6	1.38
ETHERS	MONOSUB QUAT. NITROGEN COMPOUNDS	4	82	17	2	.80
ETHERS	MONOSUB QUINONES	2	69	24	1	.24
ETHERS	MONOSUB THIOCARBAMATES	3	69	27	1	.21
ETHERS	MONOSUB THIOCYANATES	6	83	18	4	1.54
ETHERS	MONOSUB THIOUREAS	10	76	35	5	.90
ETHERS	MONOSUB UREAS	4	53	40	0	.00
ETHERS	MONOSUB MISCELLANEOUS	4	83	7	1	.99
ETHERS	DISUB ACID-HALIDES	5	67	46	3	.36
ETHERS	DISUB ALCOHOL-AMINES	4	92	4	4	7.67
ETHERS	DISUB ALCOHOL-HALIDES	3	74	18	1	.34
ETHERS	DISUB ALCOHOL-QUAT. NITROGEN COMPS.	2	10	870	1	<0.01
ETHERS	DISUB AMIDE-AMINES	2	86	13	1	.55
ETHERS	DISUB AMIDE-HALIDES	22	23	254	1	.01
ETHERS	DISUB AMIDE-NITRO COMPOUNDS	4	72	27	2	.44
ETHERS	DISUB AMIDE-PHENOLS	2	26	3	0	.00
ETHERS	DISUB AMINE-HALIDES	2	96	0	2	99.99
ETHERS	DISUB AMINE-HETEROCYCLIC COMPOUNDS	11	89	11	9	6.07
ETHERS	DISUB AMINE-IMIDES	2	32	121	0	.00
ETHERS	DISUB AMINE-NITRILES	3	92	7	2	2.19
ETHERS	DISUB AMINE-NITRO COMPOUNDS	4	78	6	0	.00
ETHERS	DISUB CARBAMATE-HALIDES	5	79	12	1	.55
ETHERS	DISUB ESTER-HALIDES	8	60	38	0	.00
ETHERS	DISUB ESTER-LACTONES	2	31	34	0	.00
ETHERS	DISUB ESTER-PHENOLS	2	30	1	0	.00
ETHERS	DISUB HALIDE-HETEROCYCLIC COMPOUNDS	4	77	21	1	.31
ETHERS	DISUB HALIDE-LACTONES	2	74	11	0	.00
ETHERS	DISUB HALIDE-NITRILES	2	92	8	1	.96
ETHERS	DISUB HALIDE-NITRO COMPOUNDS	4	42	61	0	.00
ETHERS	DISUB HALIDE-THIOCYANATES	2	94	6	2	2.61
ETHERS	DISUB HALIDE-THIOUREAS	2	90	3	2	5.00
ETHERS	DISUB HETEROCYCLIC-HYDRAZINES	2	47	51	0	.00

TABLE II

Functional Group	Substituent	No. Tested	$\bar{K}$	CV	No. K's >84	Repel-lency Index
ETHERS	DISUB HETEROCYCLIC-NITRO COMPOUNDS	5	93	6	4	5.17
ETHERS	DISUB IMINE-PHENOLS	2	48	50	0	.00
ETHERS	DISUB LACTONE-SULFONIC ACID ESTERS	2	19	18	0	.00
ETHERS	DISUB NITRO-PHENOLS	3	88	4	2	3.67
ETHERS	DISUB NITRO-THIOCYANATES	2	88	10	1	.73
ETHERS	DISUB MISCELLANEOUS	25	55	47	4	.39
ETHERS	POLYSUB	32	67	46	11	1.34
GUANIDINES	UNSUB	6	92	8	7	6.71
GUANIDINES	SUB	6	74	30	3	.62
HALIDES	UNSUB BROMIDES	14	46	134	6	.17
HALIDES	UNSUB CHLORIDES	18	49	96	6	.26
HALIDES	UNSUB FLUORIDES	1	80	0	0	99.99
HALIDES	UNSUB IODIDES	3	89	2	3	11.13
HALIDES	UNSUB MIXED	2	84	1	1	7.00
HALIDES	MONOSUB ACID ANHYDRIDES	5	62	23	0	.00
HALIDES	MONOSUB ACIDS	17	41	86	2	.08
HALIDES	MONOSUB ALCOHOLS	14	59	41	3	.36
HALIDES	MONOSUB AMIDES	90	64	41	29	3.77
HALIDES	MONOSUB AMINES	14	83	23	7	2.11
HALIDES	MONOSUB CARBAMATES	51	69	35	17	2.79
HALIDES	MONOSUB ESTERS	12	67	81	6	.41
HALIDES	MONOSUB ETHERS	16	67	27	4	.83
HALIDES	MONOSUB HETEROCYCLIC COMPOUNDS	28	59	79	11	.68
HALIDES	MONOSUB HYDROXYLAMINE DERIVATIVES	4	62	34	0	.00
HALIDES	MONOSUB IMIDES	33	53	99	10	.45
HALIDES	MONOSUB IODONIUM COMPOUNDS	13	87	11	10	6.59
HALIDES	MONOSUB KETONES	14	67	25	2	.45
HALIDES	MONOSUB LACTONES	7	65	40	3	.41
HALIDES	MONOSUB NICOTINE DERIVATIVES	4	85	8	2	1.77
HALIDES	MONOSUB NITRILES	8	68	34	4	.67
HALIDES	MONOSUB NITRO COMPOUNDS	24	77	34	10	1.89
HALIDES	MONOSUB PHENOLS	38	78	25	19	4.94
HALIDES	MONOSUB PHOSPHORUS COMPOUNDS	11	76	38	6	1.00
HALIDES	MONOSUB QUINONES	5	47	64	1	.06
HALIDES	MONOSUB SULFIDES	4	66	59	2	.19
HALIDES	MONOSUB SULFONES	6	80	34	5	.98
HALIDES	MONOSUB SULFONIC ACIDS	5	64	29	0	.00
HALIDES	MONOSUB THIOCARBAMATES	4	94	5	4	6.27
HALIDES	MONOSUB THIOCARBONATES	2	92	4	2	3.83
HALIDES	MONOSUB THIOCYANATES	3	96	4	3	6.00
HALIDES	MONOSUB THIOUREAS	19	93	11	17	11.98
HALIDES	MONOSUB UREAS	5	54	90	1	.05
HALIDES	MONOSUB MISCELLANEOUS	8	66	32	3	.52
HALIDES	DISUB ACID-AMIDES	3	85	5	2	2.83
HALIDES	DISUB ACID-ETHERS	5	67	46	3	.36
HALIDES	DISUB ACID-HETEROCYCLIC COMPOUNDS	6	80	26	4	1.03
HALIDES	DISUB ACID-PHENOLS	4	95	4	4	7.92

TABLE II

Functional Group	Substituent	No. Tested	$\bar{K}$	CV	No. K's >84	Repel-lency Index
HALIDES	DISUB ALCOHOL-AMIDES	3	86	13	2	1.10
HALIDES	DISUB ALCOHOL-AMINES	13	81	18	5	1.87
HALIDES	DISUB ALCOHOL-CARBAMATES	2	89	57	1	.13
HALIDES	DISUB ALCOHOL-ETHERS	3	74	18	1	.34
HALIDES	DISUB ALCOHOL-HETEROCYCLIC COMPOUNDS	3	95	2	3	11.88
HALIDES	DISUB ALCOHOL-NITRO COMPOUNDS	4	73	42	3	.43
HALIDES	DISUB ALCOHOL-PHENOLS	3	77	12	1	.53
HALIDES	DISUB ALCOHOL-PHOSPHORUS COMPOUNDS	2	86	0	2	99.99
HALIDES	DISUB ALCOHOL-QUAT. NITROGEN COMPS.	5	96	4	5	10.00
HALIDES	DISUB ALCOHOL-UREAS	4	45	23	0	.00
HALIDES	DISUB AMIDE-AMINES	2	81	18	1	.37
HALIDES	DISUB AMIDE-AZO COMPOUNDS	2	21	21	0	.00
HALIDES	DISUB AMIDE-ESTERS	2	54	35	0	.00
HALIDES	DISUB AMIDE-ETHERS	22	23	254	1	.01
HALIDES	DISUB AMIDE-KETONES	2	68	5	0	.00
HALIDES	DISUB AMIDE-NITRO COMPOUNDS	10	53	33	1	.13
HALIDES	DISUB AMIDE-PHENOLS	27	86	20	20	7.17
HALIDES	DISUB AMINE-ETHERS	2	96	0	2	99.99
HALIDES	DISUB AMINE-HETEROCYCLIC COMPOUNDS	9	75	39	4	.64
HALIDES	DISUB AMINE-IMIDES	3	39	6	0	.00
HALIDES	DISUB AMINE-KETONES	4	62	32	1	.16
HALIDES	DISUB AMINE-NITRILES	2	77	7	0	.00
HALIDES	DISUB AMINE-NITRO COMPOUNDS	3	78	16	2	.81
HALIDES	DISUB AMINE-QUAT. NITROGEN COMPS.	3	95	5	3	4.75
HALIDES	DISUB AMINE-SULFONES	2	76	6	0	.00
HALIDES	DISUB CARBAMATE-ESTERS	4	82	7	1	.98
HALIDES	DISUB CARBAMATE-ETHERS	5	79	12	1	.55
HALIDES	DISUB CARBAMATE-NITRILES	2	68	22	0	.00
HALIDES	DISUB ESTER-ETHERS	8	60	38	0	.00
HALIDES	DISUB ESTER-HETEROCYCLIC COMPOUNDS	14	80	52	11	1.41
HALIDES	DISUB ESTER-HYDRAZINES	3	67	25	1	.22
HALIDES	DISUB ESTER-KETONES	2	53	11	0	.00
HALIDES	DISUB ESTER-NITRO COMPOUNDS	3	43	73	1	.05
HALIDES	DISUB ESTER-SULFIDES	2	85	5	1	1.42
HALIDES	DISUB ESTER-THIOCARBAMATES	3	85	13	1	.54
HALIDES	DISUB ETHER-HETEROCYCLIC COMPOUNDS	4	77	21	1	.31
HALIDES	DISUB ETHER-LACTONES	2	74	11	0	.00
HALIDES	DISUB ETHER-NITRILES	2	92	8	1	.96
HALIDES	DISUB ETHER-NITRO COMPOUNDS	4	42	61	0	.00
HALIDES	DISUB ETHER-THIOCYANATES	2	94	6	2	2.61
HALIDES	DISUB ETHER-THIOUREAS	2	90	3	2	5.00
HALIDES	DISUB HETEROCYCLIC-HYDROXY DERIVS.	4	55	57	1	.08
HALIDES	DISUB HETEROCYCLIC-NITRO COMPOUNDS	6	87	15	2	.97
HALIDES	DISUB HETEROCYCLIC-SULFONAMIDES	2	52	43	0	.00
HALIDES	DISUB HETEROCYCLIC-THIOUREAS	2	83	7	1	.99
HALIDES	DISUB HYDRAZIDE-NITRO COMPOUNDS	2	60	8	0	.00
HALIDES	DISUB IMIDE-NITRO COMPOUNDS	4	89	7	3	3.18

TABLE II

Functional Group	Substituent	No. Tested	$\bar{K}$	CV	No. K's >84	Repellency Index
HALIDES	DISUB IMINE-PHENOLS	2	69	2	0	.00
HALIDES	DISUB NITRO-PHENOLS	3	92	6	3	3.83
HALIDES	DISUB PHENOL-SULFIDES	2	86	11	1	.65
HALIDES	DISUB MISCELLANEOUS	60	61	58	18	1.58
HALIDES	POLYSUB	52	74	36	22	3.77
HETEROCYCLIC COMPOUNDS	MIXED NITROGEN	733	65	60	298	26.90
HETEROCYCLIC COMPOUNDS	MIXED NITROGEN-OXYGEN	88	59	65	20	1.51
HETEROCYCLIC COMPOUNDS	MIXED NITROGEN-SULFUR	86	59	70	34	2.39
HETEROCYCLIC COMPOUNDS	MIXED OXYGEN	312	59	67	104	7.63
HETEROCYCLIC COMPOUNDS	MIXED OXYGEN-SULFUR	7	87	16	4	1.81
HETEROCYCLIC COMPOUNDS	MIXED SULFUR	33	75	41	21	3.20
HYDRAZIDES	UNSUB	15	74	38	7	1.14
HYDRAZIDES	SUB	39	70	50	23	2.68
HYDRAZINES AND DERIVS.	UNSUB	19	79	33	12	2.39
HYDRAZINES AND DERIVS.	SUB	31	61	65	12	.94
HYDROCARBONS	UNSUB	15	49	94	4	.17
HYDROXY DERIVS. OF HETERO	MIXED	39	48	69	6	.35
HYDROXYLAMINES AND DERIV.	UNSUB	8	65	18	1	.30
HYDROXYLAMINES AND DERIV.	SUB	28	59	65	10	.76
IMIDES	UNSUB	96	46	125	28	.86
IMIDES	MONOSUB ACIDS	3	36	154	0	.00
IMIDES	MONOSUB ALCOHOLS	5	74	22	1	.28
IMIDES	MONOSUB AMIDES	5	66	26	2	.42
IMIDES	MONOSUB AMINES	9	46	63	1	.06
IMIDES	MONOSUB ESTERS	6	34	218	2	.03
IMIDES	MONOSUB ETHERS	6	-15	-199	0	.00
IMIDES	MONOSUB HALIDES	33	53	99	10	.45
IMIDES	MONOSUB HETEROCYCLIC COMPOUNDS	8	56	81	2	.12
IMIDES	MONOSUB KETONES	2	2	950	0	.00
IMIDES	MONOSUB NITRO COMPOUNDS	17	66	54	6	.61
IMIDES	MONOSUB PHENOLS	2	63	29	0	.00
IMIDES	MONOSUB MISCELLANEOUS	5	88	11	3	2.00
IMIDES	POLYSUB	16	64	51	6	.63
IMINES	UNSUB	6	68	26	1	.22
IMINES	SUB	28	60	49	5	.51
INORGANIC COMPOUNDS		10	40	66	0	.00
IODONIUM COMPOUNDS	MIXED	24	76	31	11	2.25
IRON COMPOUNDS	MIXED	2	65	38	1	.14
ISOCYANATES	MIXED	8	33	110	2	.05
KETONES	UNSUB MONOKETONES	22	62	48	5	.54
KETONES	UNSUB POLYKETONES	22	49	72	3	.17
KETONES	MONOSUB ACIDS	10	38	50	0	.00
KETONES	MONOSUB ALCOHOLS	5	49	76	0	.00
KETONES	MONOSUB AMIDES	17	35	199	4	.06
KETONES	MONOSUB AMINES	12	72	28	4	.86
KETONES	MONOSUB ESTERS	8	27	160	1	.01
KETONES	MONOSUB ETHERS	8	54	52	1	.09

TABLE II

Functional Group	Substituent	No. Tested	$\bar{K}$	CV	No. K's >84	Repellency Index
KETONES	MONOSUB HALIDES	14	67	25	2	.45
KETONES	MONOSUB HETEROCYCLIC COMPOUNDS	19	70	40	7	1.02
KETONES	MONOSUB HYDROXYLAMINE DERIVATIVES	3	43	87	1	.04
KETONES	MONOSUB IMIDES	2	2	950	0	.00
KETONES	MONOSUB LACTAMS	2	63	29	0	.00
KETONES	MONOSUB LACTONES	4	41	101	0	.00
KETONES	MONOSUB NITRILES	11	57	41	2	.23
KETONES	MONOSUB NITRO COMPOUNDS	6	26	143	0	.00
KETONES	MONOSUB PHENOLS	12	45	34	0	.00
KETONES	MONOSUB QUATERNARY NITROGEN COMPS.	2	94	3	2	5.22
KETONES	MONOSUB SULFONAMIDES	2	49	50	0	.00
KETONES	MONOSUB MISCELLANEOUS	5	64	23	0	.00
KETONES	DISUB ACID-HETEROCYCLIC COMPOUNDS	2	48	54	0	.00
KETONES	DISUB ALCOHOL-HETEROCYCLIC COMPOUNDS	2	-9	-55	0	.00
KETONES	DISUB AMIDE-HALIDES	2	68	5	0	.00
KETONES	DISUB AMINE-HALIDES	4	62	32	1	.16
KETONES	DISUB AMINE-HETEROCYCLIC COMPOUNDS	3	55	20	0	.00
KETONES	DISUB AMINE-PHENOLS	2	50	26	0	.00
KETONES	DISUB ESTER-HALIDES	2	53	11	0	.00
KETONES	DISUB HETEROCYCLIC-NITRO COMPOUNDS	4	77	47	3	.41
KETONES	DISUB MISCELLANEOUS	30	62	54	8	.77
KETONES	POLYSUB	10	47	64	1	.06
LACTAMS	MIXED	36	60	64	11	.86
LACTONES	UNSUB	13	55	68	4	.27
LACTONES	SUB	63	45	116	11	.36
MERCURY COMPOUNDS	MIXED	25	81	37	17	3.10
NICKEL COMPOUNDS	MIXED	28	48	58	2	.14
NICOTINE DERIVATIVES	MIXED	46	86	22	35	11.40
NITRILES	UNSUB	25	67	66	14	1.18
NITRILES	MONOSUB AMIDES	6	56	54	2	.17
NITRILES	MONOSUB AMINES	17	72	40	9	1.35
NITRILES	MONOSUB CARBAMATES	4	71	12	1	.49
NITRILES	MONOSUB ESTERS	12	65	50	4	.43
NITRILES	MONOSUB ETHERS	6	83	12	3	1.73
NITRILES	MONOSUB HALIDES	8	68	34	4	.67
NITRILES	MONOSUB HETEROCYCLIC COMPOUNDS	11	78	25	7	1.82
NITRILES	MONOSUB HYDRAZINES AND DERIVATIVES	2	95	5	2	3.17
NITRILES	MONOSUB KETONES	11	57	41	2	.23
NITRILES	MONOSUB NITRO COMPOUNDS	2	66	33	1	.17
NITRILES	MONOSUB PHENOLS	2	77	24	1	.27
NITRILES	MONOSUB PHOSPHORUS COMPOUNDS	2	62	58	1	.09
NITRILES	MONOSUB SULFIDES	2	78	12	1	.54
NITRILES	MONOSUB SULFONES	2	49	46	0	.00
NITRILES	MONOSUB THIOCARBAMATES	4	55	33	0	.00
NITRILES	MONOSUB MISCELLANEOUS	11	55	94	4	.20
NITRILES	POLYSUB AMIDE-ESTERS	2	22	168	0	.00
NITRILES	POLYSUB AMINE-ETHERS	3	92	7	2	2.19

TABLE II

Functional Group	Substituent	No. Tested	$\bar{K}$	CV	No. K's >84	Repellency Index
NITRILES	POLYSUB AMINE-HALIDES	2	77	7	0	.00
NITRILES	POLYSUB AMINE-HETEROCYCLIC COMPOUNDS	5	35	93	1	.03
NITRILES	POLYSUB AMINE-PHENOLS	2	66	12	0	.00
NITRILES	POLYSUB CARBAMATE-HALIDES	2	68	22	0	.00
NITRILES	POLYSUB ETHER-HALIDES	2	92	8	1	.96
NITRILES	POLYSUB MISCELLANEOUS	15	71	23	4	1.03
NITRO COMPOUNDS	UNSUB	13	85	22	7	2.25
NITRO COMPOUNDS	MONOSUB ACIDS	4	38	87	0	.00
NITRO COMPOUNDS	MONOSUB ALDEHYDES	2	63	18	0	.00
NITRO COMPOUNDS	MONOSUB AMIDES	36	71	45	21	2.76
NITRO COMPOUNDS	MONOSUB AMINES	10	71	30	4	.79
NITRO COMPOUNDS	MONOSUB CARBAMATES	7	77	23	4	1.12
NITRO COMPOUNDS	MONOSUB ESTERS	5	65	36	2	.30
NITRO COMPOUNDS	MONOSUB ETHERS	18	72	26	6	1.38
NITRO COMPOUNDS	MONOSUB HALIDES	24	77	34	10	1.89
NITRO COMPOUNDS	MONOSUB HETEROCYCLIC COMPOUNDS	23	77	33	14	2.72
NITRO COMPOUNDS	MONOSUB HYDRAZIDES	17	79	34	12	2.32
NITRO COMPOUNDS	MONOSUB HYDRAZINES AND DERIVATIVES	3	68	30	1	.19
NITRO COMPOUNDS	MONOSUB IMIDES	17	66	54	6	.61
NITRO COMPOUNDS	MONOSUB IMINES	11	63	21	1	.25
NITRO COMPOUNDS	MONOSUB KETONES	6	26	143	0	.00
NITRO COMPOUNDS	MONOSUB LACTONES	3	68	24	0	.00
NITRO COMPOUNDS	MONOSUB NITRILES	2	66	33	1	.17
NITRO COMPOUNDS	MONOSUB PHENOLS	9	87	12	5	3.02
NITRO COMPOUNDS	MONOSUB PHOSPHORUS COMPOUNDS	3	54	122	2	.07
NITRO COMPOUNDS	MONOSUB SULFIDES	3	51	65	1	.07
NITRO COMPOUNDS	MONOSUB MISCELLANEOUS	7	66	56	3	.29
NITRO COMPOUNDS	DISUB ACID-AMIDES	3	64	35	1	.15
NITRO COMPOUNDS	DISUB ALCOHOL-HALIDES	4	73	42	3	.43
NITRO COMPOUNDS	DISUB AMIDE-ETHERS	4	72	27	2	.44
NITRO COMPOUNDS	DISUB AMIDE-HALIDES	10	53	33	1	.13
NITRO COMPOUNDS	DISUB AMIDE-HETEROCYCLIC COMPOUNDS	3	96	1	3	24.00
NITRO COMPOUNDS	DISUB AMINE-ETHERS	4	78	6	0	.00
NITRO COMPOUNDS	DISUB AMINE-HALIDES	3	78	16	2	.81
NITRO COMPOUNDS	DISUB ESTER-HALIDES	3	43	73	1	.05
NITRO COMPOUNDS	DISUB ESTER-HETEROCYCLIC COMPOUNDS	12	86	13	9	4.96
NITRO COMPOUNDS	DISUB ETHER-HALIDES	4	42	61	0	.00
NITRO COMPOUNDS	DISUB ETHER-HETEROCYCLIC COMPOUNDS	5	93	6	4	5.17
NITRO COMPOUNDS	DISUB ETHER-PHENOLS	3	88	4	2	3.67
NITRO COMPOUNDS	DISUB ETHER-THIOCYANATES	2	89	10	1	.74
NITRO COMPOUNDS	DISUB HALIDE-HETEROCYCLIC COMPOUNDS	6	87	15	2	.97
NITRO COMPOUNDS	DISUB HALIDE-HYDRAZIDES	2	60	8	0	.00
NITRO COMPOUNDS	DISUB HALIDE-IMIDES	4	89	7	3	3.18
NITRO COMPOUDNS	DISUB HALIDE-PHENOLS	3	92	6	3	3.83
NITRO COMPOUNDS	DISUB HETEROCYCLIC-HYDRAZIDES	3	41	74	0	.00
NITRO COMPOUNDS	DISUB HETEROCYCLIC-KETONES	4	77	47	3	.41
NITRO COMPOUNDS	DISUB HETEROCYCLIC-SEMICARBAZONES	3	73	35	2	.35

TABLE II

Functional Group	Substituent	No. Tested	$\bar{K}$	CV	No. K's >84	Repellency Index
NITRO COMPOUNDS	DISUB MISCELLANEOUS	32	65	51	13	1.38
NITRO COMPOUNDS	POLYSUB	11	61	77	5	.33
NITROSO COMPOUNDS	MIXED	14	60	70	4	.29
PHENOLS	UNSUB	29	71	51	15	1.74
PHENOLS	MONOSUB ACIDS	11	56	47	2	.20
PHENOLS	MONOSUB ALCOHOLS	2	86	8	1	.90
PHENOLS	MONOSUB AMIDES	13	52	60	3	.22
PHENOLS	MONOSUB AMINES	16	77	34	8	1.51
PHENOLS	MONOSUB HALIDES	38	78	25	19	4.94
PHENOLS	MONOSUB HETEROCYCLIC COMPOUNDS	5	83	18	3	1.15
PHENOLS	MONOSUB IMIDES	2	63	29	0	.00
PHENOLS	MONOSUB IMINES	5	63	59	1	.09
PHENOLS	MONOSUB KETONES	12	45	34	0	.00
PHENOLS	MONOSUB NITRILES	2	77	24	1	.27
PHENOLS	MONOSUB NITRO COMPOUNDS	9	87	12	5	3.02
PHENOLS	MONOSUB NITROSO COMPOUNDS	2	74	2	0	.00
PHENOLS	MONOSUB QUINONES	2	60	41	0	.00
PHENOLS	MONOSUB THIOCYANATES	8	98	3	8	21.78
PHENOLS	MONOSUB MISCELLANEOUS	11	68	37	3	.46
PHENOLS	DISUB ACID-HALIDES	4	95	4	4	7.92
PHENOLS	DISUB ALCOHOL-AMINES	7	79	32	4	.82
PHENOLS	DISUB ALCOHOL-HALIDES	3	77	12	1	.53
PHENOLS	DISUB AMIDE-ETHERS	2	26	3	0	.00
PHENOLS	DISUB AMIDE-HALIDES	27	86	20	20	7.17
PHENOLS	DISUB AMINE-KETONES	2	50	26	0	.00
PHENOLS	DISUB AMINE-NITRILES	2	66	12	0	.00
PHENOLS	DISUB CARBAMATE-QUINONES	2	-42	-10	0	.00
PHENOLS	DISUB ESTER-ETHERS	2	30	1	0	.00
PHENOLS	DISUB ETHER-IMINES	2	48	50	0	.00
PHENOLS	DISUB ETHER-NITRO COMPOUNDS	3	88	4	2	3.67
PHENOLS	DISUB HALIDE-IMINES	2	69	2	0	.00
PHENOLS	DISUB HALIDE-NITRO COMPOUNDS	3	92	6	3	3.83
PHENOLS	DISUB HALIDE-SULFIDES	2	86	11	1	.65
PHENOLS	DISUB MISCELLANEOUS	19	53	47	3	.28
PHENOLS	POLYSUB	20	65	59	8	.73
PHOSPHORUS COMPOUNDS	MIXED PHOSPHATES, ORTHO	13	74	33	6	1.12
PHOSPHORUS COMPOUNDS	MIXED PHOSPHITES	4	66	44	1	.12
PHOSPHORUS COMPOUNDS	MIXED PHOSPHONATES	18	73	26	5	1.17
PHOSPHORUS COMPOUNDS	MIXED PHOSPHONIUMS	9	90	10	7	5.25
PHOSPHORUS COMPOUNDS	MIXED THIOPHOSPHATES	4	58	96	3	.15
PHOSPHORUS COMPOUNDS	MIXED MISCELLANEOUS	9	69	54	5	.53
QUATERNARY NITROGEN COMP.	MIXED AMMONIUM COMPOUNDS	67	85	19	48	17.89
QUATERNARY NITROGEN COMP.	MIXED HETEROCYCLIC COMPOUNDS	68	76	45	43	6.05
QUINONES	MIXED	21	43	86	4	.17
SEMICARBAZIDES	MIXED	3	76	20	1	.32
SEMICARBAZONES	UNSUB	5	64	60	2	.18
SEMICARBAZONES	SUB	6	80	26	4	1.03

TABLE II

Functional Group	Substituent	No. Tested	$\bar{K}$	CV	No. K's >84	Repellency Index
SULFONES	UNSUB	4	82	5	2	2.73
SULFONES	SUB	28	51	74	6	.34
SULFAMIDES	MIXED	3	61	24	0	.00
SULFANILAMIDES	MIXED	15	38	58	1	.05
SULFENAMIDES	MIXED	4	70	26	2	.45
SULFIDES	MIXED MONOSULFIDES	46	71	54	22	2.41
SULFIDES	MIXED POLYSULFIDES	12	42	86	3	.12
SULFINIC ACIDS	MIXED	1	89	0	1	99.99
SULFONAMIDES	UNSUB	6	64	35	2	.30
SULFONAMIDES	SUB	30	57	56	6	.51
SULFONIC ACIDS	UNSUB	4	21	254	0	.00
SULFONIC ACIDS	SUB	33	35	121	1	.02
SULFONIC ACIDS ESTERS	MIXED	7	48	51	0	.00
SULFONYL HALIDES	MIXED	2	8	475	0	.00
SULFOXIDES	MIXED	6	44	129	3	.09
THIO AND ISOTHIOCYANATES	UNSUB	4	83	30	3	.69
THIO AND ISOTHIOCYANATES	MONOSUB ESTERS	6	82	13	2	1.05
THIO AND ISOTHIOCYANATES	MONOSUB ETHERS	6	83	18	4	1.54
THIO AND ISOTHIOCYANATES	MONOSUB HALIDES	3	96	4	3	6.00
THIO AND ISOTHIOCYANATES	MONOSUB PHENOLS	8	98	3	8	21.78
THIO AND ISOTHIOCYANATES	MONOSUB MISCELLANEOUS	6	85	12	2	1.18
THIO AND ISOTHIOCYANATES	POLYSUB	12	81	23	5	1.47
THIOAMIDES	MIXED	10	68	48	5	.59
THIOCARBOXYLATES	MIXED	3	72	19	1	.32
THIOCARBAMATES	UNSUB	25	82	23	15	4.46
THIOCARBAMATES	SUB	45	68	58	21	2.05
THIOCARBOHYDRAZIDES	MIXED	2	45	53	0	.00
THIOCARBONATES	MIXED	18	74	46	12	1.61
THIOLS	MIXED	30	63	56	11	1.03
THIONES	MIXED	1	71	0	0	99.99
THIOSEMICARBAZIDES	MIXED	1	96	0	1	99.99
THIOSEMICARBAZONES	MIXED	7	58	48	1	.10
THIOUREAS	UNSUB	97	79	29	54	12.26
THIOUREAS	MONOSUB ACIDS	6	29	162	0	.00
THIOUREAS	MONOSUB ALCOHOLS	3	79	4	0	.00
THIOUREAS	MONOSUB AMIDES	3	65	35	1	.15
THIOUREAS	MONOSUB AMINES	3	93	4	3	5.81
THIOUREAS	MONOSUB ESTERS	3	59	50	1	.10
THIOUREAS	MONOSUB ETHERS	10	76	35	5	.90
THIOUREAS	MONOSUB HALIDES	19	93	11	17	11.98
THIOUREAS	MONOSUB SULFONIC ACIDS	3	44	34	0	.00
THIOUREAS	MONOSUB MISCELLANEOUS	10	73	45	5	.68
THIOUREAS	POLYSUB	14	66	41	6	.80
THIURAMS	MIXED	16	74	37	7	1.17
TIN COMPOUNDS	MIXED	9	70	43	4	.54
UREAS	UNSUB	17	56	68	5	.34
UREAS	MONOSUB ACIDS	2	43	23	0	.00

TABLE II

Functional Group	Substituent	No. Tested	$\bar{K}$	CV	No. K's >84	Repel-lency Index
UREAS	MONOSUB ALCOHOLS	2	10	470	0	.00
UREAS	MONOSUB AMINES	5	46	70	1	.05
UREAS	MONOSUB ESTERS	5	70	36	1	.16
UREAS	MONOSUB ETHERS	4	53	40	0	.00
UREAS	MONOSUB HALIDES	5	54	90	1	.05
UREAS	MONOSUB HETEROCYCLIC COMPOUNDS	4	60	41	1	.12
UREAS	MONOSUB MISCELLANEOUS	12	38	132	1	.02
UREAS	POLYSUB	17	38	89	1	.04
ZINC COMPOUNDS	MIXED	20	55	75	7	.43

TABLE III

REPELLENCY TO RODENTS OF COMPOUNDS APPLIED TO BURLAP

Code No.	Burlap Treatment mg/in^2	Carrier*	Test Rodent	Initial Test: % Protection	Storage Test Period	Storage Test % Protection
4041	5	B	Mouse	100	2 mo	83
					6 mo	44
					1 yr	24
					2 yr	62
4073	5	A	Mouse	69	2 wk	96
					2 mo	94
					6 mo	45
					1 yr	30
	10	A	Rat	4	2 wk	50
					2 mo	25
4077	5	B	Mouse	63	2 mo	50
					6 mo	11
					2 yr	45
4259	5	C	Mouse	60	2 mo	28
		D	Mouse	32	-	-
4337	7	E	Mouse	87	3 mo	22
	5	F	Mouse	85	6 mo	38
4343	5	A	Mouse	45	-	-
		C	Mouse	23	-	-
4344	5	A	Mouse	26	-	-
		C	Mouse	20	-	-
4485	5	C	Mouse	48	2 mo	0
4487	5	H	Mouse	73	3 mo	64
					6 mo	29
		I	Mouse	100	3 mo	52
					6 mo	53
4496	5	C	Mouse	-2	-	-
4500	5	C	Mouse	-2	-	-
4530	5	A	Mouse	52	2 mo	89
					6 mo	10

TABLE III

Code No.	Burlap Treatment mg/in²	Carrier*	Test Rodent	Initial Test: % Protection	Storage Test Period	Storage Test % Protection
4550	3.5	C	Mouse	-6	-	-
4551	5	G	Mouse	32	-	-
4552	5	J	Mouse	15	-	-
4568	5	A	Mouse	51	2 mo	16
		G	Mouse	9	-	-
4570	5	A	Mouse	62	2 mo	50
					6 mo	49
		G	Mouse	20	-	-
4573	5	G	Mouse	0	-	-
			Rat	30	-	-
4575	5	A	Mouse	56	2 mo	40
		G	Mouse	27	-	-
4705	5	A	Mouse	53	2 mo	59
					6 mo	51
4735	5	A	Mouse	95	2 mo	78
					6 mo	85
					1 yr	68
					2 yr	20
4746	6	J	Mouse	34	-	-
4751	5	J	Mouse	42	-	-
4793	5	A	Mouse	49	-	-
		G	Mouse	29	4 mo	22
					7 mo	73
4812	5	A	Mouse	75	2 mo	68
					6 mo	54
		G	Mouse	26	-	-
4826	5	A	Mouse	100	2 mo	100
					6 mo	62
					1 yr	29
4829	5	A	Mouse	88	2 mo	60
					6 mo	35

TABLE III

Code No.	Burlap Treatment mg/in²	Carrier*	Test Rodent	Initial Test: % Protection	Storage Test Period	Storage Test % Protection
4833	5	A	Mouse	22	-	-
		G	Mouse	20	-	-
4838	5	G	Mouse	17	-	-
			Rat	12	-	-
4840	5	A	Mouse	33	-	-
4938	5	A	Mouse	57	2 mo	58
					6 mo	77
					1 yr	63
5112	5	A	Mouse	26	-	-
5122	5	A	Mouse	30	-	-
5127	5	A	Mouse	24	-	-
5129	5	A	Mouse	40	-	-
5253	5	A	Mouse	75	2 wk	84
					2 mo	-4
	10	A	Rat	70	2 wk	69
					2 mo	70
5359	5	A	Mouse	21	-	-
5438	5	A	Mouse	73	2 wk	43
					2 mo	14
5440	5	A	Mouse	69	2 mo	78
					6 mo	59
					1 yr	60
5442	5	A	Mouse	96	2 mo	73
					8 mo	73
					1 yr	-7
5531	5	A	Mouse	50	2 mo	47
					6 mo	56
5564	5	A	Mouse	62	2 wk	68
					2 mo	-7
5591	5	A	Mouse	65	2 mo	78
					6 mo	63
					1 yr	31

TABLE III

Code No.	Burlap Treatment mg/in^2	Carrier*	Test Rodent	Initial Test: % Protection	Storage Test Period	Storage Test % Protection
5601	5	A	Mouse	79	2 mo	66
					6 mo	72
					1 yr	66
5625	5	K	Mouse	79**	-	-
5626	5	K	Mouse	75	2 mo	89
					6 mo	81
					1 yr	69
		L	Mouse	0	-	-
5627	5	A	Mouse	46	-	-
5630	5	A	Mouse	31	-	-
5631	5	A	Mouse	53	2 mo	66
					6 mo	54
5642	5	A	Mouse	14	-	-
5643	5	A	Mouse	55	2 mo	44
5662	5	A	Mouse	88	6 wk	14
		M	Mouse	53	2 mo	69
					6 mo	41
5680	5	A	Mouse	92	2 wk	92
					2 mo	-4
	10	N	Rat	55	-	-
5691	5	O	Mouse	12	-	-
5702	5	A	Mouse	14	-	-
5704	5	A	Mouse	0	-	-
5710	5	A	Mouse	41	-	-
5767	5	J	Mouse	41	-	-
5796	5	D	Mouse	73	2 mo	76
					6 mo	16
5809	7.6	D	Mouse	35	-	-
5821	5	A	Mouse	71	2 wk	83
					2 mo	-15
			Rat	-20	-	-

TABLE III

Code No.	Burlap Treatment mg/in²	Carrier*	Test Rodent	Initial Test: % Protection	Storage Test Period	Storage Test % Protection
5858	5	A	Mouse	100	2 wk	84
					2 mo	82
					6 mo	14
5859	5	A	Mouse	88	2 wk	76
					2 mo	-2
	10	A	Rat	88	2 wk	63
					2 mo	66
					6 mo	33
5894	5	A	Mouse	74	2 mo	81
					6 mo	68
					1 yr	62
5895	3.5	A	Mouse	55	2 wk	77
					2 mo	35
					6 mo	18
6370	5	L	Mouse	24	-	-
6372	5	P	Mouse	57	3 wk	93
					2 mo	93
					4 mo	-8
6376	5	P	Mouse	20	-	-
6377	5	A	Mouse	80	2 wk	92
					2 mo	8
6378	5	A	Mouse	8	-	-
6401	5	A	Mouse	0	-	-
6405	5	A	Mouse	0	-	-
6406	5	A	Mouse	0	-	-
6410	5	A	Mouse	62	-	-
6443	5	A	Mouse	91**	-	-
6445	5	A	Mouse	70	1 yr	25
			Mouse	39	-	-
	10	A	Rat	65	6 mo	22

TABLE III

Code No.	Burlap Treatment mg/in^2	Carrier*	Test Rodent	Initial Test: % Protection	Storage Test Period	Storage Test % Protection
6450	5	A	Mouse	50	-	-
		R	Mouse	6	-	-
6452	5	A	Mouse	46	-	-
6455	5	A	Mouse	76	2 wk	92
					2 mo	20
	10	A	Rat	42	2 mo	10
6457	5	A	Mouse	23	-	-
6458	5	A	Mouse	33	-	-
6510	5	S	Mouse	68	-	-
6521	5	A	Mouse	74	2 mo	43
6548	5	A	Mouse	33	-	-
6552	5	T	Mouse	52	2 mo	57
					6 mo	42
6565	5	U	Mouse	21	-	-
6567	5	D	Mouse	35	-	-
6569	5	L	Mouse	15	-	-
6733	5	A	Mouse	31	-	-
6735	5	A	Mouse	54	3 mo	67
					6 mo	31
6737	5	A	Mouse	44	-	-
6738	5	A	Mouse	61	3 mo	65
					6 mo	31
6759	5	A	Mouse	65	3 mo	51
			Mouse	83	6 mo	0
6768	5	A	Mouse	52	3 mo	39
					6 mo	20

TABLE III

Code No.	Burlap Treatment mg/in^2	Carrier*	Test Rodent	Initial Test: % Protection	Storage Test Period	Storage Test % Protection
6781	5	A	Mouse	84	3 mo 6 mo 1 yr	67 62 51
6803	5	A	Mouse	75	2 mo 6 mo 1 yr	73 73 42
6805	5	A	Mouse	29	-	-
6969	5	A	Mouse	73	2 mo 6 mo	82 72
6998	5	A	Mouse	75	6 mo	19
7000	5	A	Mouse	58	6 mo	3
7004	5	A	Mouse	67	6 mo	17
7006	5	A	Mouse	38	-	-
7007	5	D	Mouse	47	-	-
7107	5	A	Mouse	88	2 mo 6 mo 1 yr	100 85 28
	10	A	Rat	53	-	-
7138	5	W	Mouse	29	-	-
7142	5	A	Mouse	38	-	-
7144	5	A	Mouse	48	-	-
7146	5	A	Mouse	59	-	-
7147	5	A	Mouse	60	6 mo 1 yr	75 24
7148	5	A	Mouse	64	-	-
7149	5	A	Mouse	68	6 mo	41
7154	5	A	Mouse	93	6 mo	49

TABLE III

Code No.	Burlap Treatment mg/in^2	Carrier*	Test Rodent	Initial Test: % Protection	Storage Test Period	Storage Test % Protection
7160	5	D	Mouse	26	-	-
7161	5	D	Mouse	48	-	-
7196	6.9	D	Mouse	33	-	-
7254	5	A	Mouse	-2	-	-
7277	5.7	A	Mouse	14	-	-
7280	5	A	Mouse	14	-	-
7289	5	A	Mouse	0	-	-
7291	5	A	Mouse	0	-	-
7292	5.6	D	Mouse	8	-	-
7296	5	A	Mouse	0	-	-
7299	4.3	A	Mouse	20	-	-

*Carrier Formulations

A. Acetone
B. 2.5 mg Darvan #1, 5 mg Rhoplex AC-33 and 5 mg bentonite/in^2
C. Aqueous suspension acacia 5 mg/in^2
D. Aqueous suspension
E. Acacia 7 mg/in^2 and 1-octanol
F. Methocel 0.15 mg and glycerin 25 mg/in^2
G. Aqueous Methocel 3 mg/in2
H. Methocel 1 mg and bentonite 5 mg/in^2
I. Ethanol-acetone (equal parts)
J. Methocel 1.0 mg/in^2
K. Aqueous PVA 1.25 mg/in^2
L. Ethanol
M. Aroclor 5460 5 mg/in^2 in kerosene
N. Aqueous suspension bentonite 10 mg/in^2
O. Acetone-water (equal parts)
P. Aqueous suspension Methocel 3 mg and bentonite 5 mg/in^2
Q. 5 mg Rhoplex AC-33 and bentonite/in^2
R. Suspension in 0.25% Carbopol and 1% NaOH
S. Chloroform

TABLE III

*Carrier Formulations

T. Bentonite 5 mg/in^2 suspension in acetone-water (equal parts)
U. Carbon tetrachloride
V. Aqueous PVAC 62.5 mg
W. Rhoplex AC-33 3 mg/in^2

Use of trade names does not imply endorsement of commercial products by Federal Government.

**compound decomposed during storage period.

APPENDIX I

SOURCES OF COMPOUNDS TESTED

The following private companies, institutions, and Federal laboratories supplied the compounds tested:

Aerojet-General Corporation
Azusa, California

American Potash and Chemical Corporation
3000 West Sixth Street
Los Angeles, California

The Baker Castor Oil Company
40 Avenue A
Bayonne, New Jersey

Battelle Memorial Institute
505 King Avenue
Columbus, Ohio

Bucknell University
Lewisburg, Pennsylvania

Callery Chemical Company
Callery, Pennsylvania

Chemical-Biological Coordination Center
National Research Council
Washington, D.C.

Ciba Pharmaceutical Company
Division of Ciba-Geigy Corporation
556 Morris Avenue
Summit, New Jersey

Climax Molybdenum Company
Division of American Metal Climax, Incorporated
1270 Avenue of the Americas
New York, New York

Commercial Solvents Corporation
Terre Haute, Indiana

Department of the Navy
United States Naval Research Laboratories
Washington, District of Columbia

The Dow Chemical Company
Midland, Michigan

E. I. duPont de Nemours and Company
Wilmington, Delaware

Geigy Pharmaceuticals
Division of Ciba-Geigy Corporation
Saw Mill River Road
Ardsley, New York

General Chemical Division
Allied Chemical Corporation
Morristown, New Jersey

General Mills, Incorporated
2010 East Hennepin Avenue
Minneapolis, Minnesota

The General Tire and Rubber Company
1708 Englewood Avenue
Akron, Ohio

B. F. Goodrich Chemical Company
Division of B. F. Goodrich Company
3135 Euclid Avenue
Cleveland, Ohio

Hercules Powder Company, Incorporated
910 Market Street
Wilmington, Delaware

Jefferson Chemical Company, Incorporated
7114 North Lamar Boulevard
Austin, Texas

Eli Lilly and Company
Indianapolis, Indiana

Maumee Chemical Company
1310 Expressway Drive
Toledo, Ohio

McLaughlin Gormley King Company
8810 Tenth Avenue North
Minneapolis, Minnesota

M and T Chemicals, Incorporated
Rahway, New Jersey

Mellon Institute
Pittsburg, Pennsylvania

Monsanto Company
800 North Lindbergh Boulevard
St. Louis, Missouri

Montrose Chemical Division
Baldwin-Montrose Chemical Company, Incorporated
100 Lister Avenue
Newark, New Jersey

Morton Chemical Company
Division of Morton International, Incorporated
11710 Lake Avenue
Woodstock, Illinois

Nalco Chemical Company
6216 West 66th Place
Chicago, Illinois

National Aniline Division
Allied Chemical Corporation
40 Rector Street
New York, New York

Niagara Chemical Division
FMC Corporation
100 Niagara Street
Middleport, New York

Naugatuck Chemical
Naugatuck, Connecticut

Nopco Chemical
Sixty Park Place
Newark, New Jersey

Nuodex Products Company
Division of Heyden Newport Chemical Corporation
Elizabeth, New Jersey

Ozark-Mahoning Company
Chemical Division
310 West Sixth Street
Tulsa, Oklahoma

S. B. Penick and Company
100 Church Street
New York, New York

Pennwalt Chemicals Corporation
3 Penn Center Plaza
Philadelphia, Pennsylvania

Chas. Pfizer and Company, Incorporated
235 East 42nd Street
New York, New York

Phillips Petroleum Company
Bartlesville, Oklahoma

The Quaker Oats Company
Merchandize Mart Plaza
Chicago, Illinois

Rohm and Haas Company
Independence Mall West
Philadelphia, Pennsylvania

Scientific Chemicals, Incorporated
1637 South Kilbourn Avenue
Chicago, Illinois

The Sherwin-Williams Company
Pigment, Color, and Chemical Division
260 Madison Avenue
New York, New York

Sowa Chemical Company
305 East 46th Street
New York, New York

Stecker Chemicals, Incorporated
45 North Broad Street
Ridgwood, New Jersey

Sterling-Winthrop Research Institute
Division of Sterling Drug, Incorporated
Rensselaer, New York

Sun Oil Company
1608 Walnut Street
Philadelphia, Pennsylvania

Tennessee Corporation
44 Broad Street, NW.
Atlanta, Georgia

Tennessee Eastman Company
Division Eastmen Kodak Company
Kingsport, Tennessee

Union Carbide Corporation
270 Park Avenue
New York, New York

United States Department of Agriculture
Agricultural Research Service
Eastern Regional Laboratories
Philadelphis, Pennsylvania

United States Department of Agriculture
Agricultural Research Service
Entomology Research Division
Beltsville, Maryland

United States Department of Agriculture
Agricultural Research Service
Northern Regional Laboratories
Peoria, Illinois

United States Department of Agriculture
Agricultural Research Service
Southern Regional Laboratories
New Orleans, Louisiana

United States Department of the Interior
Bureau of Sport Fisheries and Wildlife
Patuxent Wildlife Research Center
Laurel, Maryland

V-C Chemical Company
Division of Socony Mobil
401 East Main Street
Richmond, Virginia

APPENDIX II

The code number, pagination and structural formula, expressed by the Wiswesser Line-Formula Notation, for compounds listed in Table I

Code No.	Page No.	Wiswesser Line-Formula Notation
2701	133	T3MTJ
2702	80	1VOYVOR B
2703	81	1U2OVY&OVYU1&1VOYVO2U1
2704	25, 57	Q2M2Q &.H2-SI-F6
2705	55	2N2&R D- 2
2706	54	Z8 &Z8 &.H2-SI-F6
2707	54	4M4 &4M4 &.H2-SI-F6
2708	53	ZR &ZR &.H2-SI-F6
2709	54	ZR B &ZR B &.H2-SI-F6
2710	49, 65, 154	T C666 BN ISJ BVR& FN1&1 LN1&1
2711	53	Z1 &Z1 &.H2-SI-F6
2712	53	ZY &ZY &.H2-SI-F6
2713	55	1N1&1R & 2 &.H2-SI-F6
2714	53	Z6Z &.H2-SI-F6
2715	26, 57	QX&&MXQ & 2 &.H2-SI-F6
2716	104	ZYZUM & 2 &.H2-SI-F6
2717	151	T6M DOTJ & 2 &.H2-SI-F6
2718	53	Z18 &Z18 &.H2-SI-F6
2719	53	Z4 &Z4 &.H2-SI-F6
2720	53	L6TJ AZ & 2 &.H2-SI-F6
2721	32, 102, 160	T6OTJ BO2U1 CQ DQ
2722	55	9MX&&1X & 2 &.H2-SI-F6
2723	54	L B666&TTJ A EY K1Z K &.H2-SI-F6
2724	54	WNR CNW ENW &ZR CZ
2725	146, 190, 221	T6NJ C- BT5KTJ A16 A &SCN
2727	146, 190, 220	T6NJ C- BT5KTJ A4 A &WSO&R D
2728	159, 199	T5OJ B1U1R BNW DNW FNW
2731	147, 190, 221	T6NJ C- BT5KTJ A16 A &E
2734	157, 180	T56 BO DO CHJ G1U1VR
2735	95, 179	1OR B1U1VR
2736	101, 158, 203	T5OJ BNW E1O1
2737	132, 199	T56 BMNNJ HNW
2738	148	T6NJ B1U1R
2739	144	T6NJ B1U1R& F1U1R
2740	146, 190, 221	T6NJ C- BT5KTJ A A &E
2741	139, 190, 219	T6KJ A C- BT5KTJ A A &E &E

Code No.	Page No.	Wiswesser Line-Formula Notation
2742	139,190 219	T6KJ A C- BT5KTJ A A &I &I
2744	146,190 220	T6NJ C- BT5KTJ A4 A &SCN
2745	114,146 190,221	T6NJ C- BT5KTJ A1R BG DG& A &G
2746	114,146 190,221	T6NJ C- BT5KTJ A1R CG DG& A &G
2747	114,146 190,220	T6NJ C- BT5KTJ A1R BG& A &SCN
2748	146,190 220	T6NJ C-BT5KTJ A1R& A &SCN
2749	147,190 221	T6NJ C- BT5KTJ A8 A &I
2750	147,190 221	T6NTJ C- BT5KTJ A8 A &SCN
2751	139,190 219	T6KJ A4 C- BT5KTJ A4 A &E &E
2752	147,190 221	T6NJ C- BT5KTJ A A- 22 &E &E
2753	146,190 221	T6NJ C- BT5KTJ A12 A &G
2754	89,130 159,206	T5OJ BNW E1OV1G
2755	175	.AL2.Q5.G
2756	17, 80	OVR BVO &.CU-ZH2
2757	17, 80	OVVO&OVVO &/-NA- 2 &-CU-
2758	17, 80	OVVO &.CU-ZH2
2759	21, 48 202	WNR CVMYVQ2VQ
2760	94,147 188	T66 BNJ JO-HG-R
2761	138,190 243	T6NJ C- BT5NTJ A &QVVO &QVVO &-ZN-
2762	80,138 189	T6NJ C- BT5NTJ A &/QVR CVO 2 &-CU-
2763	80,138 189	T6NJ C- BT5KTJ A & 2 &OV1U1VO &-CU- -C
2764	138,189	T6NJ C- BT5NTJ A &QVR BQ &/QR BVO 2 &-CU-
2765	138,189	T6NJ C- BT5NTJ A &QVR BQ &/QR BVO 2 &-CO-
2767	138,190	T6NJ C- BT5NTJ A &QVR BQ &/QR BVO 2 &-MN-
2768	138,189 190	T6NJ C- BT5NTJ A &QVR BQ &/QR BVO 2 &-NI-
2769	138,190 243	T6NJ C- BT5NTJ A &QVR BQ &/QR BVO 2 &-ZN-
2770	138,189	T6NJ C- BT5NTJ A &OVR & 2-CD-
2771	80,138 189	T6NJ C- BT5NTJ A &OVR & 2-CU-
2772	138,189	T6NJ C- BT5NTJ A &WNR BO CNW ENW & 3-AL-

Code No.	Page No.	Wiswesser Line-Formula Notation
2773	138,190 243	T6NJ C- BT5NTJ A &.H-ZN-SCN3
2774	138,190 243	T6NJ C- BT5NTJ A & ZN-SCN2
2775	134,234	T5MYMTJ BUS
2776	114,138 190,219	T6NJ A1R CG DG& C- BT5KTJ A1R CG DG& A &G &G
2777	237	SUYZM1
2778	236	SUYZN1&1
2779	237	SUYZM2
2780	236	SUYM2&M2
2781	237	SUYM2&M 22
2782	237	SUYM2&M 24
2783	29,237	SUYM2&M2Q
2784	139,190 219	T6KJ A C- ET5KTJ A A &/WSO&R D 2
2785	147,190 221	T6NJ C- BT5KTJ A16 A &WSO&R D
2786	146,190 221	T6NJ C- BT5KTJ A12 A &WSO&R D
2787	95,161 187	T C566 DVOTTJ HR CO1 DO1& KO1 LO1
2788	95,161 187	T C566 DVOTTJ HR CO1 DO1& KO1 LO1
2789	87,100 157,186	T C566 DVOTT&J HR CO1 DOV1& KOV1 LO1
2790	87,100 157,186	T C566 DVOTT&J HR CO1 DOV1& KOV1 LO1
2791	84,157 187	T C566 DVOTT&J HR COV1 DOV1& KOV1 LO
2792	84,157 187	T C566 DVOTT&J HR COV1 DOV1& KOV1 LOV1
2793	84,157 187	T C566 DVOTT&J HR COVR& DOVR&& KOVR& LOVR
2794	101,157 186,228	T C566 DVOTT&J HR CO1 DOSWR D& KOSWR D& LOSWR D
2795	101,157 186,228	T C566 DVOTT&J HR CO1 DOSWR D& KOSWR D& LOSWR D
2796	158,205 222	T5OJ BNW E1UNMVZ
2797	161,183 205	T5OJ BV1 ENW
2798	51,158 203	T5OJ BVZ ENW
2799	158,205 222	T5OJ BNW E1UNMVVZ
2800	33, 52 103,214	L66&TJ CQ DO1 HVZ I1Q JR DQ CO1

Code No.	Page No.	Wiswesser Line-Formula Notation
2801	62,161 187	T56 BVO DHJ DR DN1&1& DR DN1&1
2802	61,161 187	T56 BVO DHJ DR DN1&1& DR DN1&1& HN1&1
2803	71,148 162,185	T C666 BO IXJ EN2&2 MN2&2 I-& DT56 BVMXJ
2804	139,190 219	T6KJ A12 C- BT5NTJ A12 A -&/WNR BO CNW ENW 2
2805	146,190 221	T6NJ C- BT5KTJ A12 A &OV8U9
2806	60,147	T66 BNJ C1U1R DN2&2
2807	139,190 219	T C5 J5 O6-14-6 A O- GK JK SK VKTT&T&J G J &/E 4
2808	62,191	1N1&R D- 2XR&CN
2824	248	.C12-H20-O10-VM6VM-
2825	104	EYR&1R
2826	105	ER DR DE
2827	207	QR BQ DR
2828	181,210	QR DVR
2829	24	QYR&1Q
2830	16	L6TJ A1VQ
2831	18, 91	QVYOR
2832	23	QR BY
2833	156,185	T B555 A 1B J BX DVOTJ A A
2834	16	L46 ATJ A A E1VQ
2835	20,207	QVR BQ CR
2836	20,207	QVR BQ ER
2837	27, 91	L66J BO3Q
2838	207	QR DXR
2839	27, 91	QY1OR DR
2840	207	QR DX2&R DQ
2841	90	RR BO2OR BR
2842	163	T C666 BO ISJ
2843	114,179	L6V DHJ-/G 5
2844	94,111	G2OR
2845	114,179	GR DVR
2846	94,111	ER DOR DE
2847	19,106	L55 ATJ A A B1VQ CG
2848	27,106	L55 ATJ A A B2Q CG
2849	163,228	T C666 BO ISJ IO
2850	82,111	L55 ATJ A A B2OV1 CG
2851	94,111	G2OR BR
2852	215	RR BO 3PO
2853	201,210	WNR BQ CR& ENW
2854	19,143	T56 BMJ D2VQ
2855	19,132	T56 BMJ D3VQ
2856	26, 57	QY1MR
2857	191	NCYR&R
2858	154,228	T C666 BM ISJ IO

Code No.	Page No.	Wiswesser Line-Formula Notation
2859	132,225	T5NJ AR DSZW
2860	32, 51 225	ZSWR DMVYQYQYQYQ1Q
2861	113,175	GR CE D-I-R DG BE &G
2862	113,175	GR CE D-I-R DG BE &I
2863	113,175	GR CE D-I-R DG BE & 2 &.S-O4
2864	113,176	GR CG D-I-R BG DG &G
2865	113,176	GR CG D-I-R BG DG
2866	113,176	GR CG D-I-R BG DG & 2 &.S-O4
2867	114,176	GR BG D-I-R CG DG &G
2868	114,176	GR BG D-I-R CG DG &I
2869	114,176	GR BG D-I-R CG DG & 2 &.S-O4
2870	113,176	ER D-I-R DE &G
2871	113,176	ER D-I-R DE
2872	113,176	ER D-I-R DE & 2 &.S-O4
2873	114,176	FR D-I-R DF &G
2874	114,176	FR D-I-R DF &I
2875	16,188	1VO-HG-R
2876	215	2OPO&O2& 22
2877	215	L66J B1PQQO
2878	116,215	GR CG D1PO&O2&O2
2879	117,215	GR BG D1PO&O2&O2
2880	102,129 215	GR CG DO2OPO&O2&O2
2881	215	L66J B1PO&O2&O2
2882	216	L66J B1OPS&O2&O2
2883	215	L66J B1OPO&O2&O2
2884	215	L66J B2OPO2&O2
2885	215	L66J B2OPO&O2&O2
2886	148,167	T66 BNJ JQ
2887	148,167	T66 BNJ JQ & H3-P-O4
2888	25, 56	1N1&R DYQR DN1&1
2889	37	11VMR
2890	68, 88 183	2OVYV1&Y/R DN1&1 2
2891	38	6U3U8VMR
2892	60,147	T66 BNJ C1Y/R DN1&1 2
2893	201,216	WNR DO 3PS
2894	166	L66J B H
2895	166	L66J C H
2896	166	L66J C D
2897	166	L66J C I
2898	166	L66J C D H
2899	221	L C666 BV IVJ E2
2900	210,222	L C666 BV IVJ DQ GQ
2901	90	1OR DO1
2902	90	2OR DO2
2903	20,178	QV2VR B D F
2904	90	4OR DO4

Code No.	Page No.	Wiswesser Line-Formula Notation
2905	177	L3TJ AVR& BVR& CR
2906	157,180 186	T5OVTJ CR& DR& EVR
2907	84,179	1OVYR&1VR DR
2908	211,223	1X&&R DQ C- 2S
2909	22,128 183	QVR BVR DE
2910	134,167 168,175 242	T6NYY ENJ BUM CUNQ DQ FQ
2911	64,151 241	T6MVMVJ FZ
2912	64,151 241	T6MVMVJ EZ FZ & 2 &.H2-S-O4
2913	40, 57	ZR B D EMVR
2914	47,207	L C666J EVMR& FQ
2915	73	ZVO1YU1
2916	58,109	FXFFR CZ EXFFF
2917	135	T56 BMJ
2918	54	ZR B E D1R DZ B E
2919	63,228	WSQR DN1&1
2920	67,124 226	WS2&R BZ DXFFF
2921	68,102 226	WS2&R CZ DO1
2922	50,122 182	GR DMV1V1
2923	141,169	T56 BVNVJ C3
2924	141,169	T56 BVNVJ C8
2925	140,169	T56 BVNVJ C12
2926	141,169	T56 BVNVJ CR D
2927	140,169	T56 BVNVJ C
2928	140,169	T56 BVNVJ C2
2934	112,132 172	T C555 A DVNV IUTJ AG AG BG E5 HG IG JG
2935	19,131 180	T B555 A 1B J BXVNV IUTJ D1VQ
2936	116,209	QR XG DR
2937	116,209	QR XG BR
2938	116,209	QR DG BR
2939	116,209	QR BG DG FG
2940	38	ZVYU1&1VZ
2941	133,169	T6VNVTJ B2
2942	149,170	T5VNVTJ B
2943	149,170	T5VNVTJ B2
2944	149,170	T5VNVTJ BY
2945	149,170	T5VNVTJ B3
2946	148,170	T5VNVTJ B2U1
2947	140,169	T56 BVNVJ CY

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2948	139,169	T56 BVNVJ C2U1
2949	133,169	T6VMVTJ
2950	133,169	T6VNVTJ BR
2951	38	RMV3VMR
2952	133,169	T5VNVJ BR& D
2953	17, 39	QVYU1VMR D
2954	133,169	T5VNVJ BR D& D
2955	149,170	T5VNVTJ B D
2956	149,170	T5VNVTJ B2 D
2957	149,170	T5VNVTJ B3 D
2958	149,170	T5VNVTJ BR& D
2959	149,170	T5VNVJ BR D& D
2960	140,169	T56 BVNVJ C1Y
2961	141,169	T56 BVNVJ CR B
2962	141,169	T56 BVNVJ CR C
2963	140,169	T56 BVNVJ C10
2964	18, 39	QV1U1VMR D
2965	137,169	T5VNVJ BR D
2966	149,170	T5VNVTJ B1Y
2967	141,169	T56 BVNVJ C5
2968	137,169	T5VNVJ B12
2969	149,170	T5VMVTJ D
2970	232	NCS12
2971	105	GXGGYR DF&R DF
2972	248	D6-CR-OVD-CR-QDJ AG AG C17 EG EG
2973	248	D6-CR-OVD-CR-QDJ AG AG CYU1 EG EG
2974	222	L6V DVJ BY E
2975	181,210	QR CV1
2976	94,111	GXGGYR DO2&R DO2
2977	116,209	QR BG DG
2978	22,213 227	L66J CQ DVQ HSWQ
2979	33,214 215	QPQO&YQR D
2980	31,120 215	GR CG DYQPO&O2&O2
2981	52,242	ZVMYZUM &.H2-S-O4
2982	132,169	T C555 A DVNV IUTJ E5
2983	174,210	QR B1UNR
2984	101,174 213	QR B1UNR DO2
2985	181,201	WNYR&YR&1VR DR
2986	61,168	QNUY&Y&UN 22
2987	168,174 176	D656 1A M A-FE-ON FND IND LNO&T&J D E J K
2988	61,168	QNUY&Y&UN 2 BR
2989	104,194	NCNYZUNCN &-KA-
2990	79,229	1N1&YUS&S 2-CU-
2991	154	T C666 BM ISJ

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2992	112,133	T6N CN ENJ BG DG FG
2993	32,121 243	ZVMYQXGGG
2994	32,121 243	GXGGYQM 2V
2995	33, 69 129,184	GXGGYQMR DV1
2996	33,205 215	WNR CYQPO&O2&O2
2997	201,211	WNR BOPS&R&O2
2998	201,216	WNR DOPS&R&O2
2999	25, 39	QY&VMX1Q
3000	17, 80	T7VO-CU-OVTJ &ZH &ZH
3001	80,138 189	T6NJ C- BT5NTJ A &QVR BVR &OVR BVR &-CU-
3002	138,189	T6NJ C- BT5NTJ A &OVR BVR & 2-CD-
3003	138,189	T6NJ C- BT5NTJ A &OVR BVR & 2-CO-
3004	80,138 189	T6NJ C- BT5NTJ A &.CU-SCN2
3005	138,189 190	T6NJ C- BT5NTJ A & 3.NI-SCN2
3006	138,189	T6NJ C- BT5NTJ A & 2.CD-SCN2
3007	80,138 189	T6NJ C- BT5NTJ A &.H2-CU-SCN4
3008	138,190	T6NJ C- BT5NTJ A &.H2-MN-SCN4
3009	138,189	T6NJ C- BT5NTJ A &.H2-CO-SCN4
3010	177	L6VYTJ BUY E
3011	71,225	ZSWR D-AS-QQO
3012	71,151 225	T6N DOTJ ASWR D-AS-O
3013	71,151 225	T6N DOTJ ASWR D-AS-QQO
3014	71,132 225	T6NTJ ASWR D-AS-QQO
3015	71,225	O-AS-R DSWMR
3016	71,225	Q-AS-QO&R DSWMR DR
3017	62,206	L6TJ ANNO&1R
3018	35	L6TJ ANR&V1
3019	55	RMR DMR
3020	55	L6TJ AN5&1R
3021	154,233	T56 BN DSJ CSH &L6TJ AZ
3022	229	L6TJ A- 2NYUS&SH &/L6TJ A- 2
3023	224,226	WSR&SS 2
3024	56	Z2M2MA
3026	163	T B656 ISJ
3027	93,111	G 5-R FO1
3029	22, 97 119	QV1OR-/G 5

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3030	87,100 125	G 5-R FO1YOV1&1OV1
3032	55	4N4&1N4&4
3033	154,233	T56 BN DSJ CSH IR
3034	135	T5M CN BUTJ B11
3035	53	Z12
3036	135	T5M CN BUTJ B
3038	155,239	T5SYMV EHJ BUM
3039	155,239	T5SYNV EHJ BUNR& CR
3040	202,224	WNR BS 2
3041	240	1N1&YUS&S 2
3042	191	NC1U1CN
3043	53	ZR BR
3045	191	NCYCN&U1R
3046	161,193	T5OJ B1UYCN&CN
3047	22,153 223	T56 BN DSJ CS1VQ
3049	229	2N2&YUS&S1R
3050	117,230	GR CG EG B1SYUS&N2&2
3051	126,148 167	T66 BNJ GE IE JQ
3052	231	SUYO2&S 2
3054	112,163	T5SJ BE EE
3055	116,209	QR BG DG F- 21
3056	194,230	SUYS&N2CN& 22 &/-NA- 2
3057	194,230 243	T9NYS-ZN-SYNTJ A2CN BUS FUS G2CN
3058	63,230	L6TJ ANYUS&SH2M- AL6TJ
3061	133,169	T5VMVJ D
3062	136,169	T5VMVY EHJ DU1
3063	138,189	T6NJ C- BT5NTJ A &.H2-CD-SCN4
3064	115,199	WNR XG BR
3065	16,188	1VO-NI-OV1
3066	177,189	1V1UY&O 2-NI-
3067	20,189 207	QR BVO 2-NI-
3068	17,189	T67 GVO-NI-OVJ
3069	17, 24 189	QY&VO-NI-OVYQ
3070	16,188	R1U1VO 2-NI-
3071	17,189	T7VO-NI-OVTJ
3072	90	RO2OR
3073	177	L5VTJ BYR&1VR
3074	95,179	1OR DV1U1R
3075	177	L6UTJ DVR& EVR
3076	177	L6VTJ BYR&1VR
3077	177	L6UTJ AR& DVR& EVR
3078	177	RVYR&U1VR DR
3079	94,162	T3OTJ B1OR BR

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3080	19,106 188	GR BVO 2-NI-
3081	19,106 188	GR DVO 2-NI-
3082	129,162 183	T56 BO DO CHJ GYEYEVR DG
3083	27,106	L C666&T&J BQ BR& DG IQ IR
3084	27,106	L C666&T&J BQ BR& EG IQ IR
3085	27,107	QX&&XEEE
3086	82,111	G2OV1 2U
3087	227	WSO&R DR &-NA-
3088	87,125 183	E1VR COVR
3089	87,125 183	EVOR DV1E
3090	116,215	GR BOPO&OR&OR BG
3091	116,215	GR BOPO&OR&OR
3092	215	1X&&R DO 3PO
3093	18, 56 188	ZR BVO 2-NI-
3094	58, 93	Z4OR
3095	181,193	NCYR&1VR D
3096	188,229	T9MYS-NI-SYMTJ BUS FUS
3097	112,143	T6NJ BE
3098	112,144	T6NJ CE
3099	42,107	G1VMR
3100	44,109	G2VMR CG
3101	115,193	NC2E
3102	94,111	G2O2OR BR
3103	87,100 125	G2O2OV1 2U
3104	94,111	G2O1R
3105	94,111	E2O2E
3106	16,188	3VO-NI-OV3
3107	94,111	L66J CO2G
3108	215	1X&&R CR& DO 2PO&OR DX
3109	115,193	NC2G
3110	87,100 125	G2O2OV1 2U
3111	82,111	G2OVYGU1OV2G
3112	137,169	T5VNVJ B
3113	137,169	T5VNVJ B2
3114	140,169	T56 BVNVJ C6
3115	149,170	T5VNVTJ B6
3116	149,170	T5VNVTJ BR D
3117	38	ZV1U1VZ
3118	154,223	T56 BN DSJ CSM- AL6TJ
3119	155,223	T5N CSJ B2SN5&5
3121	105	W-I-R

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3122	105	O-I-R
3123	51,175 183	1V1VMR D 2-I-I
3124	38	18MV17
3127	96,222	L66 BV EVJ CO1
3128	59,109	Z2E &EH
3129	222	L6V DVJ BX&&2Y EX&&2Y
3130	40, 57	2Y&NV1U2&R DMY2
3131	16	QV1UU1R
3132	22, 68 128	ZR BG DG FVQ
3133	70,145 167,206	T6N CNJ BZ DZ ENO FQ
3134	61,179	ZR DV2
3135	188	R-HG-R
3136	19,157	T56 BOJ CVQ
3137	97,225	ZSWR BO1 EO1
3138	216	RXR&R&PR&R&R &G
3139	211,225	QR DQ BSWMR
3140	37	2U1VN2&R C
3141	23	L6TJ AQ A1UU1
3142	90	1U2OR DO2U1
3144	54, 72	2M2 &.B-F3
3145	54, 73	Z8 &.B-F3
3146	53, 72	ZR &.B-F3
3147	53, 72	Z12 &.B-F3
3148	53, 72	Z12 & 2 &.B-F3
3149	53, 72	Z12 & 3.B-F3
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3152	53, 72	Z16 & 3 &.B-F3
3153	54, 73	Z14 &.B-F3
3154	54, 73	Z14 & 2 &.B-F3
3155	54, 73	Z14 & 3 &.B-F3
3156	53, 73	Z18 &.B-F3
3157	53, 73	Z18 & 2 &.B-F3
3158	25, 56 72	Q2N12&2Q &.B-F3
3159	25, 56 72	Q2N12&2Q & 2 &.B-F3
3160	25, 56 72	Q2N12&2Q & 3 &.B-F3
3161	26, 57 73	Q2N14&2Q &.B-F3
3162	26, 57 73	Q2N14&2Q & 2 &.B-F3
3163	26, 57 73	Q2N14&2Q & 3 &.B-F3

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3165	116,209	QR DG BYR
3166	207	QR BR& X1R
3167	207	QR DXR
3168	206	1YR&R BQ EX137; Q;207 Q
3169	207	QR XYR
3170	136,169	T5VMVJ
3171	55	12M2R
3172	55	6M2R
3173	55	L6TJ AM2R
3175	152	T6N DOTJ A16
3177	227	L6TJ AZ &ZSWR X12
3179	240	L6TJ AN1&YUS&S 2
3180	236	RR BM 2YUS
3181	196	WNR DR
3182	105	GR DR
3192	191	L6TJ AY&UYCN&CN
3193	191	NCYR&U1R
3195	191	NCYCN&UY3&R
3196	46,178	2N2&V2V1
3198	147,185	T5MVTJ E
3199	38	ZV8VZ
3200	191	NCYCN&UYR D
3201	191	NCYCN&UYR
3202	191	NCYCN&UYR DR
3203	191	L66 BYT&J EUYCN&CN
3204	229	L6TJ AMYUS&O2
3205	95,192	NCYCN&UYR DO2
3206	191	NCYCN&UY&R C2 E2
3208	105	GY&R BG EG
3209	117,231	SUYO2&S1R BG DG FG
3211	84,192	NC2OV1 2U
3214	115,192	NCYGU1CN
3216	79,194 230	T9NYS-CU-SYNTJ A2CN BUS FUS G2CN
3217	240	T8NYSSYNTJ A2CN BUS EUS F2CN
3218	134,235	T5MYMTJ BUS
3219	69,195 230	SUYSHN2CN&2M2CN
3220	154,240	T8NYSSYNTJ BUS EUS A- AL6TJ& F- AL6TJ
3221	229,243	T9NYS-ZN-SYNTJ A4 BUS FUS G4
3222	117,222	L6VTJ XG XG XG XG D- 2
3223	133	T B656 HNJ H1U1
3226	113,149 172	T5VNVTJ BG& DG
3227	156,186	T66 BVO EO DHJ DR
3228	114,156 186	T66 BVO EO DHJ DR BG

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3229	133,185	T66 BMVJ E
3230	82,111	2OVR-/G 4 FVO2
3231	129,196	NC1SWR DG
	226	
3232	156,186	T66 BVO EO DHJ DR CNW
	205	
3233	129,195	NC2SR DG
	224	
3234	112,162	T6O CO EXTJ AXGGG E-& 2
3235	133,199	T B656 HMTJ DNW FNW JNW INW
3236	126,133	T B656 HMJ DG FNW JNW LG
	204	
3237	112,133	T B656 HMJ DG LG
3238	112,133	T B656 HM&TT& IG
3240	196	L6TJ A1U1NW
3241	224	RVSVR
3242	196	WNR BR
3245	20,207	QVR BQ FVQ
3246	15, 86	T5VOVTJ DOV1 EOV1
	162	
3247	15,160	T66 BVOV EHJ
3248	23	L6TJ A1UU1 B
3249	34, 91	VHY&1XVH1O1
3250	16	QVR DY
3251	27,148	T66 BNJ C2Q
3252	34, 91	L66J BVH CO2
3253	16	QVR CR CVQ
3254	161,186	T56 BVOYJ DU1R
3255	221,227	L C666 BV IVJ ESWO &-NA-
3256	164	1VMMR
3257	28,140	T56 BVNVJ C2Q
	171	
3258	141,169	T56 BVNVJ CR
3259	44,159	T5OJ BVMR
3260	139,169	T56 BVNVJ C4
3261	35	1VMR DRy
3262	63,208	ZR CZ EZ BQ &/GH 3
3263	86,168	QNUY4&VO2
3264	18, 56	ZY6&VQ
3265	61;178	L55 A CUTJ A A B DZ &.H2-S-O4
3266	45,142	T6NTJ AVR& C4N1&VR
3267	240	2R C2 E2 BM 2V
3268	58, 82	QR DN1&1 &QVVQ
3269	56	8N8&8
3270	217	1N1&R&1R &G
3271	97,188	ZVM1YO1&1-HG-G
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3272	129,205	WNR CNW DSO&2G
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3273	63,227	L66J BZ DSWQ HSWQ JSWQ &/-NA- 2
3274	51,128 221	L C666 BV IVJ DMVR& GG
3275	26, 81	QYVO12
3276	181,210	QR DV1
3277	175	.NI..S-O3-Z*2
3278	175	.NI..WO-O4
3279	16,188	L6TJ A4VO 2-NI-
3280	16,188	L6TJ A5VO 2-NI-
3281	17, 24 188	OV1XQVO&1VO & 2/-NI-'3
3282	16,188	7VO-NI-OV7
3283	16,189	6U3U8VO 2-NI-
3284	17,189	T7VO-NI-OVJ
3285	16,189	4VO-NI-OV4
3286	20,178 189	1V2VO 2-NI-
3287	20,207	QR DQ BVO & 2-MG-
3288	16,189	L6TJ A2VO 2-NI-
3289	16,188	4Y2&VO 2-NI-
3290	16,189	2U8VO 2-NI-
3291	22, 97 119,188	GR CG DO1VO 2-NI-
3292	19,106 188	GR BG DVO 2-NI-
3293	85,226	4OVR DSWR DVO4
3294	40, 81	ZVYOV1
3295	40, 81	4MVYOV11
3296	26, 57	ZR D2Q
3297	117,223	GR DS1SR DG
3298	229	SUYMR&O2U1
3299	241	1U2MVMR
3300	74	L66J BMVO2U1
3301	73	RMV1R
3302	73	4OVMR
3303	73	12OVMR
3304	77,198	WNX1OVMR
3306	236	SUYZM2U1
3308	84,179	12OV2 2V
3309	84,179	1OV2V2VO1
3310	84,179	2OV2V2VO2
3311	84,179	4OV2V2VO4
3312	81	1Y&5OVR BVO5Y
3313	19,106	QVYGUYGYR&R
3315	117,236	G2SW2Ro
3317	223	12S1S12
3321	156,199	T66 BO DOT&J HNW
3323	225	2MSWR X

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3325	22, 97 119	QV1OR DG B
3326	79,154 233	T56 BN DSJ CS 2-CU-
3327	35	1VMR
3328	135	T5N BUTJ B8U9
3329	248	SUYS&N1&1 &-ZN- &ROSIN AMINE-D
3330	73,241	ZVZ &.B-F3
3331	56, 73	5N5&5 &.B-F3
3332	104	ER CE EE
3333	72	QBQR
3334	17	QVR CVQ EVQ
3335	18, 91	QVR CO1 DO1
3336	17, 24	QVYQVQ
3337	15,160	T6VOVTJ E E
3338	22, 35 102	VHR BVQ CO1 DO1
3339	71	Q-AS-QO&1R
3340	24, 27 107,188	QY1-HG-I
3341	79,111	G 5-R FOVOY
3342	79,111	G 4-R XOVOY
3343	79,111	GR BG CG DOVOY
3344	79,111	GR BG COVOY
3345	79,111	GR BG CG DOVO1
3346	139,169	T56 BVNVJ C1R
3347	20,196	WNR BVQ CVQ
3348	18, 56	QV1N1VO& 22 &/-NA- 2
3349	18, 56	QV1N1VO& 22 &/-NA- 4
3350	20,196	WNR C1U1VQ
3351	89,184 205	WNR D1VVO1
3352	73	2OVM1R
3353	78,211	QR DMVOY
3354	73	1Y&OVM1R
3355	47,208	QR BVMR B
3356	85,142 220	T6NTJ A1VO14 A &G
3357	85,217	14OV3NG1R
3358	59,144	T6NJ BZ FZ
3359	53	Z10Z
3360	165	ZMR DR &GH
3361	236	L66J BM 2YUS
3362	142,224	T6NTJ A1Y&S 2 &GH &GH
3363	76,110	GR DG BMVOY
3364	76,110	G3OVMR
3365	76,110	GR DMVOY

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3366	97,154 238	T56 BN DSJ CMR DO1
3367	76,110	G2OVMR
3368	166	R1R
3369	104	ER BE DE
3370	105	IR BG DG FG
3371	105	G 5-R F2
3372	188	R1-HG-1R
3373	71	1R D- 3-AS-
3374	71	1R D- 3-SB-
3375	206	L66TJ CQ
3376	71	Q-AS-QO&2U1
3377	71	Q-AS-QO&2Y
3378	15, 90 160	T56 BVOVJ FO1 GO1
3379	72	L66J BBQQ
3380	18, 91	QVYOR
3381	27, 91	QY&1OR DX
3382	162,186	T56 BVO DHJ DR
3383	177	RV1U1VR -T
3384	90	1XR DOR
3385	116,209	QR-/E 5
3386	30, 98 120	QY1OR DG
3387	58, 82	ZR BVO1
3388	47,208	QR BVMR
3389	39	1MVVM1
3390	127,204 213	WNR BQ CG ENW
3391	115,198	WNR BG EG
3392	105	EY&YEYE1E
3393	105	G1R B D F C1G
3394	166	L66J B- 2
3395	166	L6TJ A B1R B F DX& C EX
3396	81	2OV16VO2
3397	15,157	T56 A FVOVTJ A A B
3398	16	L5TJ AVQ A B B CVQ
3399	18, 90 188	1VO-HG-1YO1& 2
3400	16	QV11VQ
3401	21,221	L C666 BV IVJ DVQ
3402	20,178	QVR BVR B D F
3403	15	R1U1V 2O
3404	177	1R C E BV1U1R
3405	16	QV12U9
3406	83,157	T6OTJ BOV1 COV1 DOV1 F1OV1 EO- BT6OTJ COV1 DOV1 EOV1 F1OV1
3407	116,209	QR DE C E

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3408	126,163 167	T56 BSJ DQ F HG
3409	19,106	QVR CE B D F
3410	29,223	Q2S10S2Q
3411	78,153	T5OVMV EHJ E E
3412	25, 39	Q2MVVM2Q
3413	23,156 186,188 205	T56 B-HG-OVJ INW
3414	136,180 185	T56 BMVVJ I
3415	148,221	T66 BKJ B12 &WSO&R D
3416	136,219	T66 CKJ C12 &WSO&R D
3417	144,220	T6KJ A12 B D &WSO&R D
3418	141,220	T6KJ A12 D &WSO&R D
3419	141,220	T6KJ A12 C &WSO&R D
3420	141,220	T6KJ A12 B &WSO&R D
3421	144	T6NJ C- BT5M BUTJ
3422	59,137	T6NJ C1U3M1
3423	20,207	L C666J EVQ FQ
3424	44,137	T6NJ CVM- AL6TJ
3426	177	L55 A CVVTJ A A B
3427	176	1X&&1R D-I-R D1X &G
3428	176	1R D-I-R D &G
3429	45,175	1VMR D- 2-I- &G
3430	20,176	QV1R D-I-R D1VQ &I
3431	176	1X&&R D-I-R DX &G
3432	64,175	ZR D-I-R DZ &I
3433	15,161	T C555 A AO DVOV IUTJ
3434	181,210	QR DQ BV1
3435	95,157 187	T66 BOVJ E HO1
3436	29,228	Q2SO&2Q
3437	158,188	T5OJ B-HG-G
3438	117,221	L6V DVJ-/E 4
3439	182,227	L55 A CVTJ A A B1SWQ
3440	159,199	T5OJ B1U1NW
3441	40, 81	2OVR DMV1
3442	17, 39	QV5MVR
3443	35	1VMR BR
3444	58, 93	1OR DO1 BM1R
3445	59,145	T6N CNJ BZ D F
3446	132	T D6 B566 CNJ &-KA-
3447	165	L66J BMZ
3448	165	L66J CMZ
3449	67,124 203	ZR BI FI C DNW
3450	63,227	WSQR BZ E- 2

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3451	21, 48 119	QVYE4MVR
3452	23,130 184,205	WNR BG FVQ EVR
3453	118,134 242	T55 BNVN FNVNTJ AR& BG DG ER& FG HG
3454	44,153	T56 BN DSJ CNR&V1
3455	61,179	ZY2&U1VR
3456	217	12K &WSO&R DY3
3457	217	18K &WSO&R DY3
3458	117,226	G2SW12
3459	128,136 173,242	T6NVNVNVJ AG CG EG
3461	175	QPQO&OPQQO &ZH &ZH
3462	175	OPO&O& 2O &ZH 4
3463	53	L6TJ AZ & 2.H3-P-O4
3464	241	ZVZ &.H3-P-O4
3465	54	L6TJ A- 2M &.H3-P-O4
3466	105	FR DR DF
3467	86,153 237	T5SYMV EHJ BUM E1VO1Y4&2
3468	21,153 237	T5SYMV EHJ BUM E1VO &-NA-
3470	84,155 186	T56 BVOYJ DU1VO2
3471	105	GR DG BYU1
3472	66,123 144	T6N CNJ BZ DG F
3474	148,167	T66 BNJ JQ & 2.H2-S-O4
3475	133,205 206	T B656 HNJ DNW HNO
3476	133,206	T B656 HNJ HNO
3478	148,167 205	T66 BNJ GNW INW JQ
3479	154,227	T56 BN DSJ CSWO & 2-CA-
3481	235	MUYZS2 &EH
3482	236	MUYZS1 &.H2-S-O4
3483	236	MUYZS5 &EH
3484	47,237	ZV2SYZUM &GH
3485	42,107	ZV1G
3486	54	L6TJ AM1R
3487	54	L6TJ AM1R& B
3488	54	L6TJ AM1
3489	35	L6TJ AN1&V1
3490	54	L6TJ AM2
3491	54	L6TJ AM3
3492	35	L6TJ ANV1&Y
3493	54	L6TJ AM5
3494	55	L6TJ A- 2N1

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3495	54	L6TJ AM3 B
3496	54	L6TJ AMR
3497	54	L6TJ AMY
3498	54	L6TJ AM2U1
3500	116,209 243	G 5-R FO 2-ZN-
3502	36	L6TJ AMVR
3503	44,155	T5OJ B1NV1&- AL6TJ
3506	154,223	T56 BN DSJ CSM- AL6TJ
3507	55	L6TJ AN1R&1R
3509	55	L6TJ ANR&1R
3512	219	1KR &WSO&O1
3515	55	L6TJ AN1&1R
3516	18, 56	L6TJ AM1VQ
3517	55	L6TJ AN1R&Y
3518	56	Z2M2M12
3519	56	Z2M2M14
3520	56	Z2MA
3521	56	Z2M2MA
3522	55	12N4&4
3524	55	AM2MA
3525	62,197	L6TJ A- 2NR BNW DNW
3526	115,208	QR XG XG XG XG X- 2
3529	35	5N5&V1
3531	55	6N6&2N6&6
3532	53	Z16
3533	191	NC1CN
3534	37	L6TJ AMV11
3535	112,163	T B656 HSJ DG
3536	112,163	T B656 HSJ XG
3537	135	T5N CN AUTJ B C12
3538	55	L6TJ ANA&5
3542	176	T B656 H-I-J &G
3543	20,176	QVR X-I-R XVQ &I
3544	175,242	1VMVMR D- 2-I- &I
3545	175,182	1VR D-I-R DV1 &I
3546	45,176	11VMR D- 2-I- &I
3547	235	MUYZS1R &WNR BQ CNW ENW
3548	216	R 4P &E
3549	235	MUYZS1R &GH
3550	235	MUYZS1R &GH
3551	235	MUYZS1R &QV1
3552	235	MUYZS1R &QV13
3553	235	2U1VOMYUM&S1R
3554	235	MUYZS1R & 2QV2VQ
3555	235	MUYZS1R &QVR C
3556	236	MUYZS1 &IH
3557	235	2VONUYZS1R
3558	216	R 4P &I

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3559	235	MUYZS7 &EH
3561	105	G 6-R
3562	163	T B656 HSJ
3563	112,163	T56 BSJ CG DG
3564	181,210	QR DV2
3565	181,210	QR BVR DQ
3566	181,210	QR DVR DQ
3567	206	QR BR& DX
3568	206	QR B DX&&R DQ C
3569	79,157	T5OVOTJ
3570	207	QR D9
3571	115,208	QR DQ-/G 4
3572	19,106	OVYGUYGG &-NA-
3573	163,180	T56 BSJ DV1
3574	58, 93	ZR DOR DZ
3575	58, 93	RO2MR
3576	49, 98 121	ZV1OR BG DG
3577	163,199	T56 BSJ DNW
3578	16, 79	1Y&R DVO 2-CU-
3586	188	R-HG-R
3587	52, 72	Z2U1 &.B-F3
3588	54, 73	Z3 &.B-F3
3590	154,188 233	T56 BN DSJ CS-HG-R
3591	188,234	RS-HG-R
3592	188,234	12S-HG-R
3593	188,234	14S-HG-R
3595	53	Z12 &.GE-G4
3596	236	MUYZS16 &IH
3597	235	MUYZS4 &EH
3598	235	MUYZS12 &GH
3599	235	MUYZS12 &EH
3600	236	MUYZS3 &EH
3601	237	ZYZUS &GH
3602	161,186	T56 BVO DHJ
3603	157,167 183,187	T66 BOVJ DV1 EQ
3604	19,106	QVYEYER
3605	115,208	QR BE FE D
3606	140,169	T56 BVNVJ C- CL66J
3607	141,169	T56 BVNVJ CR B
3608	181,193	NC2XV1&2CN
3609	25, 56	ZY2&1Q
3610	162,199	T56 BO DO CHJ G1U1NW
3611	46,136 178	T56 BNVVJ BV1
3612	34,146	T5NJ BVH

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3613	144,165 220	T6KJ A1VMZ &G
3614	136,183 185,205	T56 BMVVJ GNW INW
3615	61,143 185	T5NNV DHJ ER& EZ
3616	163,226	T C666 BO ISWJ
3617	181,193	NC2 3XV1
3618	163,168	T5SJ B1 2NQ &GH
3619	115,208	QR BI DI F
3620	19, 72 106	GR BVO 3-BI-
3621	19, 79 106	GR BVO 2-CU-
3622	114,157 187	T5OV EHJ CG DG ER
3623	100,126 159,187	T5OV EHJ CG DG EO12
3625	148,167	T66 BNJ JQ &QVR BQ
3626	74	1YOVMR
3627	17, 80	T67 GVO-CU-OVJ
3628	19,159	T5OJ B1U1VQ
3629	159,180	T5OJ BV 2
3630	117,221	L6V DVJ BG FG
3631	78,128 159,187	T5OV EHJ CG DG EOVMR
3632	100,126 159,187	T5OV EHJ CG DG E- 2O
3633	148,167	T66 BNJ JQ &QVR
3634	157,187 194	T5OV EHJ CCN DR& ER
3635	22,128 234	SUYZMNU1YGUYGVQ
3636	156,185	T56 BVOYJ D- 2U
3637	191	NCR BCN
3638	20,178	QV1U1VR
3639	21,153 237	T5SYMV EHJ EUM E1VQ
3640	245	T56 BN DSJ CS2/O2/ 9Q
3641	32,154 223	T56 BN DSJ CS2Q
3642	244	T56 BN DSJ CS 2
3643	63,230	Z2MYUS&SH
3644	51,153 225	T5N CSJ BMSWR DMV1
3645	23,155 223	T5N CSJ BMSWR DMVR BVQ
3646	134,235	T5NYNTJ AR& BUS CR
3647	155,234	T5NN DSJ CSH ESH

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3648	151,233	T56 BN DOJ CSH
3649	154	T56 BN DSJ
3650	54	L66J CMR D- 2
3651	132	T56 BM DNJ
3652	104	QR-/G 5 &MUYMR&MR
3653	153,224 240	T6N DOTJ AYUS&S 2S
3654	70,137 154,223	T56 BN DSJ CS1M- 3 B D FT6N CN ENJ
3655	21,131 230	T6NTJ AYUS&S1VQ
3657	145,236	T6MYN CUTJ BUS D FMYZUS F
3660	134,230	T6NTJ AYUS&SM- AL6TJ
3661	144,220 224	T6KJ A2S8X &G
3662	142,229	T6NTJ AYUS&SH &T6MTJ
3663	148,234	T66 BNJ CSH
3665	144,220 224	T6KJ A2S8 &G
3668	119,143 185	T6MNV FHJ BR& DG EG
3673	77,159	T5OJ B1OVMR
3674	136,180 185	T56 BMVVJ
3675	70,103 130,157 187	T5OV EHJ CMR& DG EO1
3676	149,240	T6NTJ AYUS& 2S
3677	240	L6TJ AN1&YUS& 2S
3679	74	1OVMR
3680	74	3OVMR
3681	76,110	G2OVMR
3682	202,233	WNR CNW DSCN
3686	74	1U2OVMR D
3688	78,234	SH2OVMR
3690	128,154 233	T56 BN DSJ CSH HG
3691	102,128 223	G 5-R FO2S2R
3693	235	MUYZS2 &IH
3694	236	MUYZSY &EH
3695	235	MUYZS4 &IH
3696	236	MUYZS1Y &EH
3697	216	1PR&R&R &I
3698	216	2PR&R&R &I
3699	216	4PR&R&R &E
3700	216	6PR&R&R &E
3701	216	12PR&R&R &E
3702	235	MUYZS2 &IH

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3703	64,234	SUYZMNU1R DN1&1
3704	216	1N1& 2PO& 2O
3705	211,234	SUYZMNU1R DQ
3706	47,234	SUYZMNU1R DMV1
3707	86,155 238	T5N CSJ BZ EVO2
3708	139,169	T56 BVMVJ
3709	27, 91	L6TJ AR DO1YQ
3710	24	L C555 A DUTJ JQ
3711	161,167 183	T6O DVJ B CQ
3712	129,141 174,224	T56 BVNV GUTJ CSXGGG
3713	196	WNR CR
3714	44,152	T6N DOTJ AV1R
3715	56,197	WNR D2MVR
3716	181,193	NC2XR&V1&2CN
3717	39	1R DMV 21
3718	27,133	T66 A B CNTJ A1U1 DYQ- ET66 BNJ &QVYQR
3719	165	R1UNNU1R
3720	54	ZR DXR&R&R
3721	104,131 147,206	T66 BNJ GE HO1 JNW
3722	113,139 172	T56 BVNVJ C3E
3723	152,229	L66J C1YUS&- AT6N DOTJ
3724	225	1U2NR&SWR D
3725	152,229	L66&TJ C1YUS&- AT6N DOTJ
3726	236	MUYZS3 &IH
3727	53	ZR &R1U1R
3729	159,199	T5OJ B1U1R BNW DNW FNW
3730	196	WNR CNW ENW B1U1R
3731	148,167	T66 BNJ JQ &QV1U1VQ
3733	148,167	T66 BNJ JQ &.H3-P-O4
3734	163,180	T5SJ BV1
3736	156,186	T66 BVO EO DHJ D
3737	194,229	SUYMR&CN
3738	84,192	2OVYCN&U1R
3740	18, 39	QVR BVM12
3741	176	OCNR BR
3742	53	L6TJ AZ B- AL6TJ
3743	89,163 214	T5STJ B1OVR BQ
3745	15,106 161	T56 BVOVJ FG GG HG IG
3748	112,163	T B656 HSJ XG
3751	81	1OVYU1&1VO1
3752	114,156 186	T66 BVO EOTJ D IG

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3753	156,186	T66 BVO EO DHJ D G
3755	84,192	NC1VO1U2R
3756	194,224	NC2S2CN
3759	191	L55 A CUTJ FCN F GCN
3760	116,216	GR D- 3PO
3761	191	L55 A CUTJ FCN GCN
3764	191	L6 H666/GP 2AF P&&TTJ OCN PCN
3765	144,185	T6NVJ A
3766	191	L6UTJ A C DCN ECN
3767	95,156 186	T66 BVO EOTJ D GO1
3770	114,156 186	T66 BVO EO DHJ D HE
3771	48,151 186	T66 BVO EN DHJ DR& EV1
3774	51,128 151,186	T66 BVO EN DHJ DXGGG EV1
3775	84,157 187	T6OVJ EVO1
3776	194,226	WSR&1CN
3778	46,147 191	T66 BNJ BVR& CCN
3780	194,226	WSR&2CN
3781	133,185	T66 BNVJ B
3782	133,193	T B656 HNJ H2CN
3783	162,186	T56 BVOYJ DU2
3784	22, 35 128	VHYGUYGVQ
3786	137,169	T5VNVJ BR
3787	117,224	GR DSSR DG
3788	224	1R DSSR D
3789	159,199	T5OJ B1U1NW
3790	128,159 183,187	T5OV EHJ CG DG E1VR
3791	143,185	T5NNV DHJ BR& E
3792	228	SUYMR
3793	114,179	L C555 A AV DV EU IUTJ-/G 8
3795	163,226	T56 BSWJ
3796	182,233	NCS1VR
3797	96,232	NCS2OR
3799	144,202 220	T6KJ AR BNW DNW &G
3800	112,163	T56 BSJ DG
3801	112,163	T56 BSJ CG DG
3802	112,163	T56 BSJ CG DG XG XG
3803	112,163	T56 BSJ CG DG XG XG XG
3804	89,159 195	T5OJ B1UYCN&VO2

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3805	51,159 195	T5OJ B1UYVZCN
3806	144,162	T6NJ B1U1- BT5OJ
3807	113,136 172	T5VNVJ BR BG
3808	113,136 172	T5VNVJ BR CG
3809	113,136 172	T5VNVJ BR DG
3810	137,169	T5VNVJ BR B
3811	115,199	WN1U1R BG
3812	115,199	WN1U1R DG
3813	115,199	WN1U1R BG DNW
3814	115,199	WN1U1R BG DG
3815	115,199	WN1U1R CG DG
3816	95,198	WN1U1R BO1
3817	163,199	T5SJ B1U1NW
3818	236	MUYZS1Y &IH
3819	152,193	T6N DOTJ AYCN&1CN
3820	156,186	T66 BVO EO DHJ
3821	161,187	T C666 DVO GOTJ F
3822	156,186	T66 BVO EO DHJ D1U1R
3823	114,156 186	T66 BVO EO DHJ DR BG FG
3824	156,186	T66 BVO EO DHJ D- GT56 BO DO CHJ
3825	156,186	T66 BVO EO DHJ H D- GT56 BO DO CHJ
3826	114,156 186	T66 BVO EO DHJ D G IG
3828	228	WSFR DR DSWF
3830	37	VHMR BR
3836	222	ZVMNUYR
3838	105	GXGGXGGG
3841	112,163	T5SJ BYE1E EG
3842	129,163 233	T5SJ BYSCN&1SCN EG
3843	163,184 233	T5SJ BV1SCN
3844	191	NCYR&1CN
3846	245	T6MPMPMPJ EZ BO DQ DO FO F- 2M &ZH &ZH
3848	21,153 237	T5SYMV EHJ BUM E1VQ &Z16
3849	21,153 237	T5SYMV EHJ BUM E1VQ &L6TJ A- 2M
3850	21,153 237	T5SYMV EHJ BUM E1VQ &L6TJ AZ
3851	232	NCS1R D1SCN
3853	139,185	T B666 HMVJ
3854	74	RMVO2OVMR
3856	163,222	T5SJ B1UNMVZ

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3857	58, 82	ZR DVO4
3858	76,110	F2OVMR
3859	118,232	L6TJ-/G 5 ASCN
3862	218	18K &WSO&R
3863	218	18K &WSO&R DG
3864	218	18K &WSO&R CNW
3865	218	18K &WSO&R D
3866	218	18K &WSO&R DF
3867	218	12K &WSO&R D
3868	218	12K &WSO&R CNW
3869	218	12K &WSO&R DF
3870	218	12K &WSO&R DG
3871	218	12K &WSO&R
3872	217	12K1R &WSO&R D
3873	54	ZR CZ &WNR CNW ENW
3874	135,160	T5OJ B- 3 B D ET5M CNJ
3875	215	2OPO&O2& 22
3876	206,210	QR C DNO
3877	216	1R CO 2PS&S 2S &/1R DO 2PS&S 2S
3878	216	2X&&R DO 2PS&SH
3879	38	2N2&VY
3880	177	5V1V1
3881	61,179	2N2&1V1
3882	116,209	QR DG C FY
3883	177	12XV1V1
3884	177	1VY4&VR
3885	66,100 203	WNR BZ EO1 CNW
3886	97,168	QNU1R DO1
3887	95,198	WNR CO1 ENW
3888	181,201	WNR CV1V1
3889	144,167	T6NJ BQ
3890	181,193	NCYR&V2
3891	206,210	QR B F DNO
3892	154,166	T56 BN DSJ CMZ
3893	174,200	WNR C1UNR
3894	177	11V11
3895	174,200	WNR CNU1R
3896	177	RV1VR
3897	34,196	WNR CVH
3898	202,234	WNR D1UNMYZUS
3899	210,210	WNR BQ D F ENW
3900	201,210	WNR BQ CNW EY
3901	201,210	WNR BQ D CNW ENW
3902	37	2N2&V1U1R
3905	181,210	QR BVVR BQ
3906	194,230 243	NC2N2&YUS&S 2-ZN-
3907	17,243	T67 GVO-ZN-OVJ

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3908	73	1U2OVMR
3909	22, 35 128	VHYGUYGVQ
3910	117,221	L C666 BV IVJ EG
3911	15, 33 157,184 187	T B565 CVOV JOV FH&TTJ GQ G HV1 IQ
3914	176	L C666 BV IYJ IU1
3915	162,186	T56 BVOYJ DU3
3916	181,210	QR BV1U1R BQ
3919	53	ZY5
3920	141	T6MTJ B
3921	154,233 243	T56 BN DSJ CS 2-ZN-
3922	223	ZSWR DZ
3923	154,223	T5N CSJ BMSWR DZ
3925	134	T5N CNTJ AR& BR& CR
3928	19,163	T5SJ B1U1VQ
3935	177	1VR CV1 EV1
3937	144,185 194	T6MVJ CCN D F
3938	20,196	QV2XNWNW2VQ
3939	77,198	1OVM2 2XNWNW
3940	162,187 201	T5OVTJ DNW DNW E
3941	62,197	Z2XNWNW2Z &GH
3942	79,177	D6O-CU-DVJ D F2 B-& 2
3943	27, 91	Q2OR X X
3944	30, 98 120	Q2OR-/G 5
3945	118,225	OSO&R DG &-NA-
3946	116,215	G 5-R FO 3PO
3947	85,198	WNR C ENW EOV1
3948	27,152	T6N DOTJ A2Q
3949	28,152 219	T6K DOTJ A2Q A2Q &G
3950	31, 98 152,219	T6K DOTJ A2Q A2 2O &G &G
3951	53	WNR BQ C ENW &Z1
3952	79,229	2N2&YUS&S 2-CU-
3953	188,229	2N2&YUS&S 2-HG-
3954	229	SUYS&N2&2 &-NA-
3955	240	2N2&YUS&S 2
3956	80,152 230	T6N DOTJ AYUS&S 2-CU-
3957	152,188 230	T6N DOTJ AYUS&S 2-HG-
3958	152,230	T6N DOTJ AYS&US &-NA-
3959	96,232	NCS2O2SCN

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3960	28, 79 230	Q2N2QYUS&S 2-CU-
3961	28,188 230	Q2N2QYUS&S 2-HG-
3962	32,152 230	T6N DOTJ AYUS&S2Q
3963	127,152 225	T6N DOTJ ASWR CG DG
3964	127,151 225	T6N DOTJ ASWR DG
3965	89,103 129,233	NCS1VO2OR-/G 5
3966	229	GR DSWSYUS&N2&2
3967	96,152 230	T6N DOTJ AYUS&S2 2O
3968	96,230	2N2&YUS&S2 2O
3969	90,103 130,152 231	T6N DOTJ AYUS&S1VO2OR-/G 5
3970	89,103 129,230	G 5-R FO2OV1SYUS&N2&2
3971	36	1YMV1U1
3972	32, 69 160	T6OTJ BN2Q2Q CQ DQ EQ F1Q
3973	174	1Y&U1NU1Y
3974	45,155 188	T5N CSJ BMV1 D-HG-OV1 E-HG-OV1
3975	154,165 205,214	T56 BN DSJ CMNU1R DQ& GNW
3976	101,153 165	T56 BN DSJ CMNU1R DO1
3977	51,154 165	T56 BN DSJ CMNU1R DMV1
3978	218	L6TJ AR DSWO &1K
3979	144,220	T6KJ A5 &WSO&R
3980	217	1K1R &WSO&R D
3981	152,219	T6K DOTJ A5 A &WSO&R
3982	59,109	E6N2&2 &EH
3983	127,144 204	T6NJ BG ENW
3984	90,131 148,167	T66 BNJ DVO2 EQ I JG
3986	161,185	T5OV EHJ E & 2
3988	19,106	QVXFF 2
3989	112,161	T7OTJ-/F 1 2
3990	19,106	QV/XFF/ 4VQ
3991	112,161	T9OTJ-/F 1 6
3992	164	ZMV1U2

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3993	160,187 201	L5VTJ B1NW C C
3994	63,208	1X&&R BQ EMR
3995	66, 99 147	T66 BNJ HO1 JZ &GH
3996	34,119	VHXGGYG
3997	19,106	QV1R DG
3998	34,196	WNR DVH
3999	74	2OVMR
4000	72,211	QR DNUNR
4001	19,106	QVR-/G 4 FVQ
4002	22,205 227	WSO&R BVQ ENW &-KA-
4006	88,159 203	T5OJ BNW E1OV1
4007	88,159 203	T5OJ BNW E1YOV1& 2
4008	71	S-AS-2
4009	32,162 182	T56 BO DO CHJ G- 2/YQV/
4010	17	QVYU1VQ
4011	162,180 187	T B566 COV LV IHTT&J E I M
4012	28,227	WSQ2Q
4013	15,106 161	T56 BVOVJ-/G 4
4014	46,178	1V1VMR
4015	132,242	T5MVMV EHJ EMVZ
4016	18, 39	QVVMR
4017	20,131 184	T6VMNVJ CR& E1VQ
4018	84,143 185	T6VMNVJ CR& E1VO2
4019	53	ZR DR
4020	136,219	T66 BKJ B2Y E1U- ET66 BN EYJ B2Y &I
4021	55	2NR&1R
4022	191	NC1Y
4023	63,227	L66J BZ ESWO &-NA-
4024	115,198	WNR CG DG FNW
4025	217	12K1R &WSO&R
4031	63,230	SUYS1&MR B
4034	115,199	L6TJ AG B1UY2&NW
4035	59,145	T6N CNTJ AY6 CY6 EZ E
4036	145,199	T6N CNTJ AY6 CY6 ENW E
4038	202,224	WNY&YR& 2S
4039	240	1Y&N1&YUS&S 2
4040	115,199	WNY2&U1R DG
4041	159,199	T5OJ B1U1NW
4042	153	T5M COTJ BR& E E

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4043	63,208	QR B1MR
4044	62,197	WNX&&1NR&1R
4045	196	WNY&U1R CNW
4046	202,224	WN1YR& 2S
4047	145,236	T6M CN DHJ BSH D D F
4048	133,231	T56 BN DNJ CS 2YUS
4049	240	L6TJ A- 2NYUS& 2S
4050	211,232	QR DSCN
4052	80,155 234	T6N CS DHJ D D F BSH &-CU-
4053	79,132 234	T56 BM DNJ CS 2-CU-
4054	132,234 243	T56 BM DNJ CS 2-ZN-
4055	211,232	QR B DSCN
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4057	211,232	QR C E DSCN
4058	211,232	QR B F DSCN
4059	132,231	T56 BM DNJ CSVO2
4060	211,232	NCSR DQ CY
4061	211,232	NCSR DQ B EY
4062	210,232	NCSR DQ C EX
4063	152	T5N DOTJ A12
4064	152	T5N DOTJ A12 C E
4065	146	T5NTJ A12
4066	55	12N1&1
4073	154,231	T6NYS ENTJ A BUS E
4075	134	T5N CNJ AOV1 B17
4076	240	1N1&YUS&S 2S
4077	196	WN1U1R
4078	196	WNYU1R
4079	196	WNY2&U1R
4080	196	WNY3&U1R
4081	156,199	T5OJ B1UY2&NW
4082	127,158 204	T5OJ B1UYENW
4083	156,199	T56 BO DO CHJ G1UY2&NW
4084	196	WNYU1R D
4085	95,198	WNY2&U1R DO1
4086	115,199	WNY2&U1R BG DG
4087	115,199	WNY2&U1R CG DG
4088	101,204 213	WNY2&U1R DQ CO1
4089	201,210	WNYU1R DQ
4090	115,199	WNYEU1R
4091	166,200	L6YTJ AUNMR BNW DNW
4092	53	L66J XZ XZ XZ
4093	53	L6TJ AMV1
4094	53	L66J XZ XZ XZ &/GH 3

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4095	53	L66J-/ XZ &WNR BQ CNW ENW 3
4098	105	L5 AHJ AXGGG-/G 5
4099	16	OV9U1 &-NA-
4100	17, 24	QY6&2U8VO & 2-CA-
4101	17, 24	QY6&2U8VO &-NA-
4102	155,186	T6OV DOTJ
4103	20,178	L4TJ AV1 B B C1VQ
4104	17	L4TJ AVQ B B C1VQ
4105	24	L46 ATJ A A EQ E
4106	248	T5 I6 F666/FO/FS 3AEF S BVOV FX RUTJ JVQ J N RY
4107	81	L55 A CUTJ FVO14 GVO14
4108	82,111	G1VOR-/G 5
4109	231	SUYO2&SVO2
4110	116,215	E1YE1O 3PO
4111	114,179	L C555 A AV DV EU IUTJ-/G 8
4112	223,226	WSR&SR
4113	79,128	GR BG DG EOVO 22
4114	152,185	T6MV DOTJ
4115	32, 51	ZV1O2Q
	102	
4117	73	1Y&OVMR CMVOY
4118	40, 82	4Y2&VOYVMR
4119	89,129	GXGGYMQYV1&VO2
	168,184	
4120	70, 72	L66J BQ CNUNR DZ& DSWO HSWO JQ &/-NA- 2
	214,227	
4121	76,110	GR CMVO 22
4122	144,220	/Y- BT6KJ A& 1YR&1/ &WS1&O1
4123	248	/YR DSWO&1/ &-NA-
4130	105	GXR&R& 2
4131	96,221	L6V DVJ BR DO2
4132	115,208	L66J BE CQ HE
4133	35	1VNR&R
4134	158,166	T5OJ B1UN 2
4135	234	SUYZM 2
4136	77,155	T5N CSJ BMVO2
4137	77,155	T5N CSJ BMVO1R& D-HG-G E-HG-G
	188	
4138	178	1V1U1R
4139	67,124	ZR BG DNW
	203	
4140	67,124	ZR DG BNW
	203	
4141	94,111	GR DO1OR DG
4142	105	E1YEYE1E
4145	116,209	QR BG DX&&R DQ CG
4146	202,230	RSVM2 2XNWNW
4147	177	L56 BV DV CHJ CV2
4148	177	L56 BVT&J DO C- AL3TJ &-KA-

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4149	126,148 167	T66 BNJ EQ GG
4150	112,147	T66 BNJ EG GG
4151	135	T5M CN BUTJ BA
4153	132	T56 BM DNJ CV- AL6TJ
4155	105	ER CR
4156	105	IR BR
4157	166	1R DYR&R D
4158	90	RYR&OYR&R
4159	16	1U2U1VO-AG-
4160	177	L6V CVTJ E E
4161	19,160	T56 BO DO CHJ G1VQ
4162	160,180	T C565 DO FO JV EH&&TJ
4163	19,160	T56 BO DO CHJ G2VQ
4164	95,179	L6V BUTJ CO2 E E
4165	28,178	L6VTJ CQ CR
4166	27,162	T56 BO DO CHJ GY2Q2Q
4167	83,162	T6OTJ BYVO2&VO2
4168	177	L6V BUTJ DR D
4169	26, 81	QX2&R&1VO2
4170	95,179	1OR DV2R
4171	177	L6V BUTJ CR DR
4172	16	L66 A BTJ A A CR& DVQ EVQ GR
4173	114,179	GR D1U1VR
4174	100,126 162	T6OTJ BO1 CE
4175	100,126 162	T6OTJ BO2 CE DE
4176	100,126 162	T6OTJ BO2 CE
4177	114,179	L6V BUTJ CR CG
4178	51,102 156	T56 BO DO CHJ G2MVR CO1 DO1 EO1
4179	222	ZVMNU2U2U1
4180	37	L6TJ A1VZ DR
4181	181,201	WNR D1U1VR
4182	59,156	T56 BO DO CHJ G2 2M &GH
4183	58, 93	1N1&R D- 2YR DO1
4184	55	1N1&R D- 3Y
4185	55	1N1&R D- 2Y6
4186	201,210	WNR BQ CR& ENW
4187	116,215	GR BO 3PO
4188	154	T C666 BM ISJ
4189	22, 97 119	QVYOR BG
4190	105	GYR&1G
4191	22,119 211	QVR BQ EE
4192	207	L6TJ AR DQ

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4193	116,208	QR BE DR
4194	23	L6TJ AQ BR
4195	90	ROR
4196	175	.BA..E2
4198	207	L6TJ AR BQ
4199	175	.MG..E2
4200	166	R1R
4201	105	EYEYEE
4202	163,228	T C666 BO ISJ IO
4203	114,179	L55 A CVTJ A A B DE
4205	105	ER DR DE
4206	116,209	QR-/E 5
4207	94,111	ER DOR DE
4208	240	1N1&YUS&S 2
4209	105	E1YEYE1E
4211	104	ER DE
4212	116,209	QR BE DE FE
4214	105	EYR&R
4217	163	T C666 BO ISJ
4218	94,111	G2OR
4219	114,179	GR DVR
4221	216	AK &WSO&R D12
4222	216	AK &G
4223	216	12K &G
4224	217	12K &WSO&R D12
4225	217	18K &WSO&R D12
4226	216	18K &G
4232	237	SUYZM12
4233	59,109	ZR BE DE FE
4234	112,168	QNUYR DG
4235	231	SUYS&OY2 &-KA-
4236	213,227	L C666 BV IVJ DQ GQ ESWO 2-MN-
4237	58, 93	1OR BZ ER DZ CO1
4238	132,184	T56 BM DN FVNVNTJ D G I
4239	63,208	L C666J BQ DZ GZ IQ
4240	46,178	RVYR&MVR
4241	45,178	RVYR&MV1R
4242	165	RMMR
4243	59,109	ZR BG DR DG CG &GH &GH
4244	136	T5N CN BHJ B B DR& ER
4245	133	T5NXNJ DR& ER& B-& AL6XTJ
4246	136	T5N CN BHJ BR& BR& DR& ER
4247	136	T5N CN BHJ B1R& B1R& DR& ER &QH
4248	63,227	WSQR CZ F- 2
4249	64	WSQO2M2OSWO &-KA- &QH
4250	142,185	T6MV DMVTJ
4251	141,220	T6KJ A B &I
4252	162,199	T5OJ BNW ER BNW DNW FNW C1U1
4254	55	9U9N1&1

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4255	55	18N1&1
4256	152	T5N DOTJ A18
4257	152	T6N DOTJ A18 C E
4258	146	T5NTJ A18
4259	53	Z18
4260	35,129 214	VHR BQ CG EG
4261	129,168 214	QNU1R BQ CG EG
4262	116,208	L6TJ AR DQ CG
4263	116,208	L6TJ AR BQ EG
4265	206	1U2R CQ F- 2
4266	105	L6TJ-/G 6
4297	191	L55 A CUTJ FCN GCN
4298	32,195 223	NCYQ2S1
4300	97,241	1OR BMVMR
4302	29, 34	VHX1Q
4303	177	1R D1U1VR
4304	182,223	RV1S1R
4305	139	T66 BVNNJ CR& E
4306	141,173 180	T56 BVNVJ C1VR
4307	62,197	1N1&R D- 2YR DNW
4308	181,201	WNR DV1U1R
4309	61,178	1N1&R D1U1VR
4310	55	1N1&R D- 2YR D
4311	55	1N1&R D- 2YR
4312	59,109	1N1&R D- 2YR DG
4313	151	T56 BNONJ BO
4315	61,175	ZR DNU1R
4316	202,228	WSG1U1R DNW
4317	27,135	T5N CN AUTJ B13 C2Q
4318	27,135	T5N CN AUTJ BAUA C2Q
4319	27,135	T5N CN AUTJ B17 C2Q
4320	22,183 213	QVR BVR DQ
4321	24	L C555 A DUTJ IQ J1Q I/J
4322	22,119 211	QVR BQ EE
4323	100,126 162	T3OTJ B1OR BG DG EG
4324	134,241	T55 BMVM FMVMJ
4325	134,241	T5MVMTJ
4326	137,169	T5VNVJ B
4327	29,134 241	T55 BNVN FNVNJ B1Q D1Q F1Q H1Q
4328	45,149	T6N CN ENJ BMV1 DMV1 FR

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4329	68,139 182	T6N CN ENJ BZ DZ F2 2XV1&YU1
4330	73	1Y&OVMR D- 2
4331	96,219	1X&&1X&&R XO2OK &E
4332	73	1Y&OVMR B D- 2
4333	23, 96 219	OV1K&&2O2OR DX&&1X
4334	31, 98 217	Q2K&1R&2O2OR XX&&1X &G
4335	229	SUYS1&MR
4336	60,150	T6N CN ENJ BZ DZ FR
4337	60,149	T6N CN ENJ BZ DZ F1R
4338	60,149	T6N CN ENJ BM1 DM1 F
4339	69,150 224	T6N CN ENJ BZ DZ FS1
4340	76,110	GR D CMVOY
4341	105	GR CG EG
4342	181,210	QR BQ DQ EV1
4343	94,156	T3OTJ B1O 2 DR
4344	94,156	T3OTJ B1O 2 DR BX
4345	94,156	T3OTJ B1O 2 DR BX EX
4346	63,208	1Y&R DQ CX E1N1&1
4347	218	AUAUAK &AUAK &G &G A-TOTAL C18
4348	218	14K14 &G &122
4349	218	18K18 &G &132
4350	218	14K &12K &G &G
4351	218	14K &G &132
4352	218	12K &G &QY
4353	218	AUAK &16K &G &G
4354	218	16K &G
4355	218	AUAUAK &AUAK &G &G &QY A-TOTAL C18
4356	218	18K &G &QY
4357	218	12K &G
4358	95,179	L5YVYTJ AU1R DO1& CU1R DO1
4359	141,169	T56 BVNVJ C8
4360	68,174 183	1N1&R DNUYR&VR
4361	62,197	WNR CNW DM2
4362	66, 99 195	NC1MR BO1
4363	17, 39	QVR BMV 2
4364	162,199	T56 BO DO CHJ G1U1R BNW DNW
4365	84,166	1YOVMMR
4366	77,192	NCR CMVOY
4367	74	1Y&MVOY
4368	75, 93	2OR CMVOY
4369	66,100 203	WNR CNW DMR BO1
4370	74	1Y&OVMR B EY

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4371	75, 93	2CR DO2 BMVOY
4372	126,156 204	T66 BO DOT&J CXGGG EXGGG HNW
4373	76,110	GR CG DMVOY
4374	87,125 166	GR CG BNZVOY
4375	76,110	GR B CMVOY
4376	76,110	GR B EMVOY
4377	114,179	L56 BV DV CHJ CV2 XG XG
4378	114,179	L56 BV DV CHJ CV1Y CG
4379	102,128 213	QR BG CG EG F1R BG CG EG FO1
4380	112,162	T8O CO EO GOTJ
4381	126,209	QR BG DG FG C- 21
4382	126,209	QR BG DG F- 2YXGGG
4383	94,111	1OR BG DG F- 2YXGGG
4384	140,169	T56 BVNVJ C2
4385	140,169	T56 BVNVJ CY
4386	164	1Y2VMMR
4387	140,173 200	T56 BVNVJ CR CNW
4388	164	RMMV1R
4389	164	17VMMR
4390	46,196	WNR DVN2&2
4391	46,197	WNR DVM3
4392	46,197	WNR DVMY
4393	46,197	WNR DVM1
4394	46,197	WNR DVNY&&Y
4395	46,197	WNR DVN3&3
4396	165	RVMMVR
4397	51,152 203	T6N DOTJ AVR CNW
4398	46,197	WNR CVM1Y
4399	151,209	T6N DOTJ A1R BQ
4400	46,196	L6TJ AMVR CNW
4401	46,197	WNR CVNY&&Y
4402	142,206	T6N DNTJ ANO DNO
4403	46,196	WNR DVM1R
4404	85,198	WNR DVOR DNW
4405	85,198	WNR DVOR C
4406	181,193	L5VTJ B2CN B2CN E2CN E2CN
4407	88,183 195	NC2XV1&VO1&2CN
4408	151,187	T5NOVYJ DU2U1R& E
4409	164	RMMVVMMR
4410	181,193	NC2XVR&2CN
4411	58, 72	ZR B DNUNR E
4412	113,140 172	T56 BVNVJ CR CG

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4413	118,225	ER DSWMR D
4414	49, 86 121	GR DMVVO2
4415	50,122 202	WNR CVMR CG
4417	157,185	T5OVYJ CU1R& ER
4418	71,231	1X&&OYUS&S 3-AS-
4419	47,197	WNR CNW DMV2
4420	101,158 203	T5OTJ B1OR BNW DNW
4421	96,198	WNR COR BNW DNW
4422	96,198	WNR CNW DOR D BNW
4423	193,210	L66J B2CN CQ
4424	175,210	QR BNU1R
4425	47,207	L66J CQ B2VM- AL6TJ
4426	96,198	L66J B- G-/OR BNW DNW 2
4427	128,151 213	T6N DOTJ A1R BQ EG
4428	43,108	GR CG DVMR BG EG
4429	43,108	GR CG DVMR DE
4430	43,108	GR BG DVMR DE
4431	50,122 202	WNR BMVR BG DG
4432	43,108	GR BMVR CG DG
4433	43,108	GR DVMR BG EG
4434	43,108	GR CMVR CG DG
4435	50,122 202	WNR CMVR DG
4436	43,107	L6TJ AMVR BG DG
4437	42,107	GR CG DVM1R
4438	49, 98 122	GR CG DVMR BO1
4439	48, 98 122	GR CG DVMR DO1
4440	43,108	GR DVMR B
4441	43,108	GR DVMR D
4442	49, 72 121	GR DVMR DNUNR
4443	42,107	GR BVMY2
4444	43,107	GR BVM5
4445	43,107	GR BVMR DE
4446	50,122 202	WNR BMVR DG
4447	43,108	GR BVMR BG
4448	43,108	GR BVMR CG
4449	43,108	GR DVMR
4450	43,108	GR BVMR C
4451	43,108	GR BVMR B
4452	43,108	GR BVMR D

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4453	49, 98 122	GR BVMR DO1
4454	43,107	GR DVMY4
4455	43,108	GR BG DVMR
4456	43,107	GR CG DVMR BE
4457	43,108	GR BVMR DG
4458	43,108	GR CG DVMR BR
4459	43,107	GR CG DVM5
4460	88,125 203	WNR DVOR DG
4461	20,207	QVR BQ C E- 21
4462	22,119 211	QVR BQ CG EG
4463	22,119 211	QVR BQ EG
4464	31,120 215	GR BYQPO&O2&O2
4465	47, 80 208	ZVR BO 2-CU-
4466	162,168	T56 BO DO CHJ G1UNQ
4467	135,241	T5MVMJ DR& ER
4468	31,120 144	T6NJ B1YQXGGG
4469	33, 52 130,214	QR BVMYQXGGG
4470	31,120 202	WNY&YQR CG DG
4471	117,154 231	T5MVYSYJ CU1R CG DG& EUS
4472	112,168	GR BG D1UNO1R CG DG
4474	27, 91	Q2OR BR
4475	32,102 183	Q2OR DVR
4476	97,134 241	T5NVNTJ A1O1 C1O1
4477	35	L6TJ AMV1U1
4478	32,102 205	Q2OR BNW DX2
4479	97,153 242	T6NVN EOTJ A1O4 C1O4
4480	85,192	1U2OV2 2XCN&CN
4481	68,195 212	QR DR& B1N2CN&2CN
4482	181,217	6V1U1X&&1K1R &G
4483	181,217	RVYVR&1X&&1K1R &G
4484	229	12MYUS& 2
4485	59,137	T6N CN ENJ BZ DZ FN1&1
4486	62,191	NCN1R&1R
4487	135,235	T5M CN BUTJ BS12

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4488	22,213 233	QVR BQ E1SCN
4489	127,204 213	WNR BQ CE EX
4490	69,102 150,240	T6N CN ENJ BZ DZ FS2 2O
4491	194,225	WSR&N2CN&2CN
4492	22,136 167	T6NJ BQ DVQ FQ
4493	76,109	ZVO2G
4494	188	-HG-R
4495	18, 56 188	ZR D-HG-OV1
4496	72,188	R-HG-O 3B
4497	17, 24 188	Q1YQYQVO-HG-R
4498	188	WNO-HG-R
4499	17, 24 188	QYVO-HG-R
4500	17,188	R-HG-OV 2 BR
4501	28,217	Q2K12&2Q1R &G
4502	28,217	Q2K14&2Q1R &G
4503	28,217	Q2K16&2Q1R &G
4504	31,121 217	GR CG D1K14&2Q2Q &G
4505	31,121 217	GR BG D1K14&2Q2Q &G
4506	31,121 217	GR CG D1K16&2Q2Q &G
4507	31,121 217	GR BG D1K16&2Q2Q &G
4508	96,198	L6TJ AR BOR BNW DNW
4509	80,116 209	QR-/G 5 & CU-Z2
4527	118,232	SCNR BE
4528	117,230	SUYSHMR BE &ZH
4529	229	L66J CMYUS&SH &ZH
4530	223,230	STRUCTURE UNKNOWN
4531	232	L66J CNCS
4533	237	SUYZM12
4536	54	Z14
4537	240	1N1&YUS&S 2
4538	206	QR D4
4539	206	QR B4
4540	18, 90	QV1OR B1U3
4541	81	1U2OV 3/1Y1/
4542	177	L5VTJ BR& ER
4543	116,208	QR-/G 4 X4

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4544	51, 52 104,136	T56 BN DM FVM IN HHJ HZ IMYUM&MMV- DT6NJ
4545	58, 93	1U2OY1U1&N1&1
4546	164	1YR&UNMVR
4547	101,151 165	T56 BN DOJ CMNU1R BO2
4548	134,166	T6NJ DVMMV9U1
4549	181,193	L6VTJ B2CN B2CN F2CN F2CN
4550	104	MUYZM18 &.H2-S-O4
4551	104	MUYZM14 &.H2-S-O4
4552	166,231	SUYSHMMR &ZH
4553	166,231	SUYS1&MMR
4554	154,234	T6NN DSJ CSH FR
4555	104	MUYZMR D- 2 &.H2-S-O4
4556	191	NCXR&R&3CN
4557	174,194	L5YTJ AUM BR& BR& ECN
4558	155,167	T5N CSJ BQ E
4559	128,136 165	T6NJ BG DVMZ
4560	101,126 203	WNR CNW DOR DG
4561	101,126 203	WNR CNW DOR DE
4562	65, 99 123	ZR CG DOR DG &GH
4563	151,165 226	T56 BN DOJ CMNU1R DSW2
4564	58, 93	ZR DO6 &WSQR
4565	206	L66J BQ &WNR CNW ENW
4566	166	L66J &WNR CNW ENW
4567	36	1Y&VMY
4568	35	1XMV1U1
4569	38	1Y&MVYU1
4570	25, 39	QY&VMX
4571	38	1Y&VMX
4572	40, 81	1X&&MVYOV1
4573	38	L6TJ AMVY
4574	36	1X&&1XMV1U1
4575	25, 40	Q2VMX&&1X
4576	38	1Y&VMX&&1X
4577	25, 39	L55 ATJ A A CMVYQ
4578	38	1X&&MV4VMX
4579	36	1X&&1XMVR
4580	25, 40	L55 ATJ A A B CMV2Q
4581	36	/YVMY&&1/
4649	196	WNR CNW ENW &QH
4650	28,207	QX2R DQ
4651	206	QR X1R X X X1R XQ
4652	206	QR X X1 2 ER B D

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4653	207	1X&&R BQ E C1 2 ER B D
4654	207	1X&&R DQ C E1 2 ER B D
4655	206	1R C D1R XQ X X1 2 ER B D
4656	207	1R C D1R BQ EY C1 2 ER B D
4657	116,209	QR DG BE F- 2YXGGG
4658	46,196	WNR DVM4
4659	46,196	WNR DVMY2
4660	46,197	WNR DVM1Y
4661	116,209	L6TJ A- A-/R DQ CG EG 2
4662	88,159	T5OTJ B1OVR DNW
	203	
4663	46,197	WNR DVM5
4664	88,144	T6NJ B2OVR CNW
	203	
4665	240	2NR&VN2&R
4666	46,197	WNR DVN1Y&&1Y
4667	62,206	ONR DN1&1
4668	46,196	WNR DVN1R&1R
4669	66,100	WNR CNW DO2N1R&1R
	203	
4670	77,198	WNR CMVOY
4671	75, 93	1YOVMR CO1
4672	74	1Y&OVMR B C
4673	74	1Y&OVMR B D
4674	74	1Y&OVMR B E
4675	74	1Y&OVMR B F
4676	74	1Y&OVMR C E
4677	40, 82	15VM2OV1
4678	18, 39	QV7Y9&MV1
4679	75, 93	1Y&OVMR BO1 D- 2
4680	50,122	WNR DVMR DG
	202	
4681	65, 99	G 5-R FO2N2&2
	123	
4682	144,234	T6NJ AO BSH
4686	44,109	GR DG BMV2
4687	76,110	GR BG CMVOY
4688	76,110	GR D CMVOY &GR B CMVOY
4689	49, 72	GR CG DVMR DNUNR
	121	
4690	127,213	QR DG BSR BQ EG
	224	
4697	245	QR DG B1R BQ EG
4698	245	QR DG B1R BQ EG
4699	245	QR BG DG EG F- 21
4700	245	NO STRUCTURE
4704	147,241	T66 BMVMVJ
4705	132,184	T66 BNNMVJ
4706	237	SUYMR&M12

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4707	236	12MYUS&M12
4709	27, 91	Q2OR D- 2X
4710	15,157	T56 BVOV GUTJ
4711	34	1UY&1O 2YY
4712	79	1Y&OVOR COVOY
4713	79	1Y&OVOR BOVOY
4714	231	SUYO4&S1VO & 2-CA-
4715	85,224	2OV2S2VO2
4716	85,224	4OV2S2VO4
4717	85,224	6Y&OV2 2S
4718	96,217	1X&&1X&&R DO2O2K1R &SCN
4719	69,102	T56 BK DHJ B C1U1MR BO1 DO1& D D &G
	143,220	
4720	164	ZMV4VMZ
4721	69,150	T6N CN ENJ BZ DZ F- BT5OJ
	162	
4722	36	1U1VMR
4723	153	T5N CO AUTJ B11 D
4724	68,195	L66J B1N2CN&2CN CQ
	212	
4725	153	T5N CO AUTJ B8U9
4726	153	T5VNVTJ BX1OV8U9
4727	153	T5N COTJ B8U3U6 D
4728	153	T5N CO AUTJ B8U9 D
4729	153	T5N CO AUTJ B17 D
4730	84,149	T5N CO AUTJ B8U2U7 D
	171	
4731	84,140	T56 BVNVJ C2OV8U9
	171	
4732	84,140	T56 BVNVJ C2OV17
	171	
4733	59,137	T6N CN ENJ BZ DZ FMR
4734	60,150	T6N CN ENJ BZ DZ F- AT6NTJ
4735	60,150	T6N CN ENJ BZ DZ FY
4736	60,150	T6N CN ENJ BZ DZ F- CL6UTJ
4737	60,149	T6N CN ENJ BM1 DM1 FR
4738	59,127	T6N CN ENJ BZ DZ FN1YU1&1YU1
4739	60,150	T6N CN ENJ BZ DZ F- 2 BR
4740	69,143	T56 BN DSJ B GM1U1- CT56 BK DHJ B D D &G
	163,220	
4741	143,220	T56 BNJ C B1U1- CT56 BK DHJ B D D &G
4742	67,124	T56 BK DHJ B C1U1R DN1&2G D D &G
	143,220	
4743	67,124	L6Y DYJ AUYR DN1&1&R DG& DUK &G
	217	
4744	67,124	T56 BK DHJ B C1U1R B DN2&2G D D &G
	143,220	
4745	59,109	L6Y DYJ AUYR BG&R C DM2& C DUN2 &GH
4746	143,220	T56 BK DHJ B D D C1U1- DT56 BNJ B CR

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4747	50,122 202	WNR DMVR DG
4748	97,238	MUYZS2OR DX&&1X &EH
4749	30, 78 120	GY&XGGYQMVO4
4750	97,135 238	T5N CN AUTJ BS2O 22
4751	23, 72 143,227	T5NNV DHJ BR BSWQ& DNUNR BSWQ& EVQ
4752	33, 70 130,133	T6N CN ENJ BZ DMYQXGGG FR
4753	88,125 223	G1VOR D- 2S
4754	62,197	WNR CNW DM2U1
4755	36	L6TJ AMV3
4756	17, 39	QVR BMV3
4757	164,200	L5YTJ AUNMVR DNW
4758	42, 92	3VMR DO2
4759	164,200	L6YTJ AUNMVR DNW
4760	164,200	WNR DVMNU1Y2&2
4761	166,200	WNR CNW DMNUY5
4762	49, 99 202	WNR BMVR DO1
4763	156,164 204	T56 BO DO CHJ G1UNMVR DNW
4764	164,200	WNR DVMNUYR
4765	95,198	WNR CNW DOR BO1 D2U1
4766	95,198	WNR CNW DO 2 DR
4767	96,198	WNR CNW DOR BR
4768	96,198	WNR CNW DOR DR
4769	96,198	L6TJ AR CNW ENW BOR BNW DNW
4770	62,197	WNR CNW DN1R&1R
4771	50,122 202	WNR CMVR BG
4772	50,122 202	WNR DMVR BG
4773	43,108	GR DVMR BG
4774	43,108	GR DVMR CG
4775	42,107	L6TJ AMVR BG
4776	42,107	L6TJ AMVR DG
4777	127,204 213	WNR BQ EG C- 2YXGGG
4778	42,107	GR BVM1R
4779	42,107	GR DVM1R
4780	43,107	GR DVMY3
4781	43,107	GR DVN3&3
4782	49, 98 121	GR DG BMVR DO1

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4783	49, 98 121	GR BMVR DO1
4784	49, 98 121	GR CMVR DO1
4785	49, 98 121	GR DMVR DO1
4786	101,126 203	WNR CNW DOR BG DX
4787	35	1XMV1U1
4788	38	L6TJ AMVY
4791	25, 40	QY&VMX
4792	25, 40	Q2VMX3&2&2
4793	25, 40	QYVMA
4794	67,123 150	T6N CN ENJ BG DG FR BG
4796	53	ZR X4
4797	53	ZR X4 X4
4798	41, 92	ZVR Z2 Z2
4799	182,225	L55 A CVTJ A A B DSWM4
4800	25, 57	ZR D2Q &ZR B2Q &GH &GH
4801	94,162	T6O BUTJ D FO1Y
4802	35	1VM2U1
4803	17, 39	QVYU1&MV1 &ZH
4804	40, 57	L6TJ AM1VZ
4805	44,151	T6N DOTJ AV3
4807	44,152	T6N DOTJ AV5
4808	58,109	GR BM2U1
4809	117,226	G2SWX
4810	40, 57	Z2MV8VM2Z
4811	136,169	T5VNVJ B4
4812	25, 57	Q2N4&R
4813	30, 65 120	QY&1NR BG&1YQ
4814	63,208	4MR DQ CX
4815	80	2U1VO 24
4816	40, 81	1VO3YOV1&1MV1
4817	45,139 171	T56 BVMVJ GMV1
4818	61,139 171	T56 BVMVJ FZ
4819	26, 57	QY&1NR&1YQ
4820	26, 57	L66J BN1YQ1Q1YQ1Q
4821	82,111	1UYG1OV 24
4822	36	1U1VM1
4824	61,148 171	T5VNVTJ BR& DMR
4825	36	1U1VM 21
4826	191	NCYCN&U1R

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4827	45,132 171	T56 BVNVJ C1MV1U1
4828	40, 81	2OVYVO2&MV1
4829	85,192	NCXCN&OV1
4830	35	L6TJ AMV1U1
4831	81	2OVYU2&VO2
4832	85,192	NCXOV1
4833	228	SUY&N1&1
4834	228	SUYM1
4835	117,226	GR DSWR DG
4836	55	R1M2M1R
4837	40, 57	1Y1MR BMV1
4838	48, 65 98	1VMR BZ DO1
4839	18, 56	L66J CZ DVQ &GH
4840	45,178	1VMR CV1
4841	40, 81	1VO1XMV1
4842	84,192	2OVYCN&U1R
4843	83,160	T5OJ BVO1
4844	83,159	T5OJ BVO4
4845	87,125 160	T5OTJ BVO1 CG DG EG
4846	87,125 160	T5OTJ BVO4 CG DG EG
4847	87,125 160	T5OTJ BVO3 CG DG EG
4848	82,160	T5OJ BVO3
4850	191	NC8CN
4851	115,192	NC1R BG DG FG
4852	84,192	2OVYCN&U1R
4853	46,147 191	T66 BN CHJ BVR& CCN
4854	152,193	T6N DOTJ AYCN&1CN
4855	194,222	1VMR DSWNCN & 2-CA-
4856	62,192	QR-/G 5 &NC2MY
4857	32,195 223	NCYQ2S1
4858	46,191	ZV1CN
4859	87,125 160	T5OTJ BVO2 CG DG EG
4860	83,159	T5OJ BVO2
4861	139,169	T56 BVNVJ C4
4862	155,180 186	T5OVT CV1
4863	157,167 213	T66 BOT&J CR CQ DQ& DQ GQ IQ
4864	207	L5TJ AR BQ
4865	207	L5TJ AR DQ

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4866	158,167 184,214	T66 BO EVT&J CR CQ DQ& GQ IQ
4867	23	L B556 A 1E K BXTJ C G G IQ I
4868	93,111	GR BG DG EO1
4869	116,209	QR BG CG EG FG
4870	116,208	QR BG XG X2U2
4871	94,111	GR BG DG EG CO4
4872	35	1XMV1 &.H-YT-E3
4873	77,157	T5OJ B1MVOY
4874	77,192	NCYOVMR
4875	75, 93	1Y&OVMR BO1 DO1
4876	115,198	WNR BG CG EG FG
4877	101,126 203	WNR-/G 4 DO1
4878	88,125 203	WNR-/G 4 DOV1
4879	76,110	G2OVMR CG
4880	78,100 124	1Y&OVMR CG FO1
4881	128,164 233	SHR BVMNU1R BG DG
4882	164,224	ZMVR BS 2 &GH &GH
4883	128,164 224	GR CG D1UNMVR BS 2
4884	84,179	L5VVTJ CVO2 EVO2
4885	126,215	QPQO&1R BG DG
4886	127,215	QPQO&1R CG DG
4887	126,215	GR CG D1PO&O2&O2
4888	114,179	L6V BUTJ-/G 8
4889	69,205 213	WNR CNW DMR DQ
4890	181,193	NC2 3XVR
4891	151,187	T5NOVYJ DU1R& E
4892	73	2OVNR&R
4893	58, 93	1Y&R X XY& XO2N1R&1R
4894	58, 93	1Y&R X XY& XO2N1R&1R
4895	32, 69 205	WNR CNW DM2Q
4896	74,146	T5NTJ AVOY
4897	101,204 213	WNY&U1R DQ CO1
4898	84,166	1Y&OVMN1&R
4899	77,144	T6NJ BMVOY D F
4900	75, 82	RMVOYVO1R
4901	54	2Y&MR DR DMY2
4902	43,107	GR CG DVM1Y
4903	88,125 203	WNR BOVR BG DG

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4904	50,122 202	WNR CMVR BG DG
4905	43,108	GR CG DVMR BG
4906	43,108	GR CG DVMR CG
4907	43,108	GR CG DVMR DG
4908	43,108	GR CG DVMR C
4909	43,108	GR BG DVMR C
4910	43,108	GR CG DVMR D
4911	49, 98 122	GR BG DVMR DO1
4912	49, 98 121	GR CMV1OR-/G 5
4913	76,110	G2OVMR BG EG
4914	87,125 166	G2OVMMR
4915	78,124 195	NCR CMVO2G
4916	76,110	G2OVMR CG F
4917	76,110	G2OVMR C
4918	78, 86 124	G2OVYOVMR
4919	43,107	GR CG DVMY3
4920	78,100 124	GR CG DO2OVMR
4921	21,164	ZMVY4&VQ
4925	66,123 150	T6N CN ENJ BZ DZ FG
4926	133,184	T7MVTJ
4927	32, 69 196	Q2NR&2CN & 2 &.H2-S-O4
4928	85,192	2U1YCN&OV1
4929	157,185	T4OVTJ D4
4930	42,107	G1VM16
4931	143,185	T6NMV EUTJ
4932	33,130 205,225	WNR BG ENW CSWM2Q
4933	19,106	QVR CG FVQ
4934	40, 81	2OV1VMX&& 24
4935	33, 70 103,130	G1YQ1MR BO1
4936	84,143 185	T5NMV DHJ EVO2
4937	47,207	L66J CQ DVM- AL6TJ
4938	21,194	QV1X1CN
4939	48, 65 121	ZV1MR CE
4940	48, 65 98	ZV1MR C FO1

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4941	48, 65 121	ZV1MR CG
4942	64,241	L6TJ AM1MVZ
4943	151	RNU1R
4944	164,200	WNR DVMNU1
4945	164,200	WNR DVMNU1
4946	164,200	WNR DVMNU4
4947	164,200	WNR DVMNUYR
4948	114,179	L6V BUTJ-/G 8
4949	164,200	WNR DVMNUY
4950	164,200	WNR DVMNUY2
4951	156,164 204	T56 BO DO CHJ G1UNMVR DNW
4952	164,183 205	WNR DVMNUY1V1
4953	164,200	WNR DVMNU3
4954	164,200	L5YTJ AUNMVR DNW
4955	164,200	L6YTJ AUNMVR DNW
4956	127,164 204	WNR DVMNU1R BG
4957	164,200	WNR DVMNU2U1R
4958	164,200	WNR DVMNU1Y2&2
4959	127,164 204	WNR DVMNU1XGGG
4960	164	1YUNMVR
4961	164	1YR&UNMVR
4962	164	RVMNU2U1R
4963	156,164	T56 BO DO CHJ G1UNMVR
4964	83,159	T5OJ BVOY
4965	22,119 160	T5OJ BVQ EE
4966	22,119 160	T5OJ BVQ EG
4967	88,160 203	T5OJ BVO2 ENW
4968	127,158 204	T5OJ BNW EG
4969	83,159	T5OJ BVO6
4970	83,159	T5OJ BVO2Y
4971	83,160	T5OJ BVO8
4972	83,159	T5OJ BVO10
4973	83,159	T5OJ BVO2U1
4974	44,158	T5OJ BVZ
4975	165	ZMR &GH
4976	166,200	WNR CNW DMNUY&1UY
4977	83,159	WNR CNW DO1R
4978	96,198	L6TJ AOR BNW DNW
4979	101,158 203	T5OTJ B1OR BNW DNW

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4980	95,198	WNR CNW DOR BO1 D2U1
4981	175,210	QR BNU1R
4982	174,210	QR BNU1R BQ
4983	127,175 213	QR BNU1R BG
4984	101,175 213	QR B1VU1R DO1
4985	127,175 213	QR BNU1R DG
4986	32, 51 205	WNR DVM2Q
4987	41, 91	2MVR DO1
4988	41, 91	1OR DVM1
4989	41, 91	3MVR DO1
4990	41, 91	1YMVR DO1
4991	42, 92 142	T6NTJ AVR DO1
4992	49, 98 121	GR BMVR DO1
4993	49, 98 121	GR CMVR DO1
4994	49, 98 121	GR DMVR DO1
4995	49, 98 121	GR DG BMVR DO1
4996	49, 99 202	WNR BMVR DO1
4997	41, 91	1Y1MVR DO1
4998	49, 99 202	WNR DMVR DO1
4999	41, 91	1U2MVR DO1
5000	94,164	1OR DVMMR
5001	42, 92	1OR DVMR C
5002	42, 92	1OR DVMR B
5003	42, 92	1OR DVMR D
5004	52,129 155	T5N CSJ BMVX
5005	41, 91	1OR DVMR DO1
5006	42, 92	1OR DVMR BO1
5007	156,185	T5OVTJ CR BR
5008	79	18OVO18
5009	27,107	GXGGYQXGGG
5010	22, 97 119	QV1OR BG CG EG FG
5011	38	1XVMR
5012	21,145 241	T6MVMVJ EVQ
5013	77,198	WNX1OVMR
5014	77,152	T6N DOTJ A2OVMR

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5015	51,104 195	NCMYUM&MV1
5016	74	1UY1OVMR
5017	26, 75	ZVO1YQ
5018	26, 75	Q2OVM2Q
5019	26, 75	Q2OVN2Q2Q
5020	77,152	T6N DOTJ AVOY
5021	26, 75	Q2OVM 22
5022	26, 75	Q2OVM2Y
5023	74	1UU2OVMR
5024	77,192	NC2OVMR
5025	38	1UYVMR
5026	77,192	NCXOVMR
5027	26, 75	Q2OVM12
5028	152	T B656 HKJ H-& AT6K DOTJ
5029	45,174	L B656 HYJ EMV1 HUNR
5030	26, 75	Q2OVM18
5031	45,174	L B656 HHJ ENU1R DMV1
5032	175,201	L B656 HYJ ENW KNW HUN 2 DR
5033	149	T D585 A D- BN DN GN INTJ
5034	174	L B656 HUJ HUNR
5035	225	1R DSWMR D
5036	89,145 239	T6MYMVJ BUS EVO2
5037	77,110	G1Y1GOVMR CG
5038	175,201	L B656 HYJ ENW HUN 2 DR
5039	49, 98 121	ER DMVR DO1
5040	51,127 225	ZSWR DMVXGGG
5041	40, 81	1VOR DMV1
5042	35	2NR&V1
5043	38	2VN2&R
5044	38	4NR&V2
5045	154,223	T56 BN DSJ CS3U1
5046	85,226	1VOR DSWR DOV1
5047	46,196	WNR CMV1
5048	42,107	GR DR DMV1
5049	42,107	GR DR BNV1&V1
5050	40, 72	1VMR DNUNR
5051	40, 72	1VMR B DNUNR B
5052	47,221	L C666 BV IVJ EMV1
5053	44,109	GR DMV2
5054	44,109	GR BMV2
5055	44,109	GR CMV2
5056	44,109	GR DG BMV2
5057	47,197	WNR CMV2
5058	47,197	WNR BMV2
5059	46,196	WNR CNW DMV2

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5060	37	3VN1&R
5061	37	3VN2&R
5062	37	4NR&V3
5063	37	5NR&V3
5064	36	4MV3
5065	44,108	GR CMV3
5066	44,108	GR BMV3
5067	44,108	GR DNV3
5068	47,197	WNR CMV3
5069	47,197	WNR DMV3
5070	44,108	GR DG BMV3
5071	37	3VMR C
5072	37	3VMR B
5073	42, 92	3VMR BO1
5074	37	3VMR D
5075	101,126 195	NC1OR BG DG
5076	142,193	T6NTJ ACN
5077	132,193	T3NTJ A2CN
5079	166,193	ZNUY2&YCN&1UNZ
5080	101,126 195	NC2OR BG
5081	95,192	NC2OR X9
5082	95,192	NC2OR D
5083	194,215	NC2PO&O1&O1
5084	194,215	QPQO&1X6&6&CN
5086	115,193	NCYG
5087	66, 99 195	NC2MR BO1
5088	66, 99 195	NC2MR BO2
5089	129,196 226	NC2NR&SWR BG D
5090	62,192	NC2MR
5091	67,124 195	NC2MR CG
5092	67,124 195	NC2MR BG
5093	62,192	NC2MR B2
5094	62,192	NC2N1&R
5096	62,192	NC2N2&R
5097	194,234	NC2SR D
5100	115,193	NCXGG1G
5101	62,191	NC1N2&2
5102	95,192	NCY2&OR
5103	30, 64 119	Q2MR BG
5104	37	2U1VM2U1

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5105	30, 64 119	Q2MR CG
5106	84,179	1V1VO2U1
5107	159	T5OTJ B B D D
5108	84,148 171	T5VNVTJ B2OV1
5109	40, 57	9U8VM3N2&2
5110	81	2OVYU2&VO2
5111	29, 64 119	QY&1NR BG&1YQ
5112	155,242	STRUCTURE UNKNOWN
5113	136,169	T5VNVJ B4
5114	35	1VM2U1
5115	36	1U1VM1
5116	85,192	NCXCN&OV1
5117	23, 69 102,233	QVYSHR BZ EO2
5118	139,209	T5NN BUTJ AR& CR DQ& ER
5119	45,155	T5N CSJ BMV1 D
5120	30, 65 119	Q2MR BG EG
5121	149,170	T5VNVTJ B1U1
5122	60,151	T5MN DM EHJ CZ &WNR CNW ENW
5123	97,154 238	T56 BN DSJ CZ FO1 GO1
5124	164	ZMVVMZ
5126	32, 51 205	WNR DVM2Q
5127	45,155	T5N CSJ BMV1 E
5128	25, 57	L66J BM2Q C
5129	29, 48 119	Q2N12&V1G
5130	48,226	1VMR B E- 2SW
5131	53	Z12 &WSQR D
5132	51,155 203	T5N CSJ BMV1 DNW E
5133	35	L55 ATJ A A B CMV1U1
5134	25, 39	Q2MV1VM2Q
5135	191	NCYCN&U1R
5136	17, 39	QV1U1VM1
5138	117,230	SUYGN2&2
5139	155,231	T5NN DSJ C- E-/SYUS&N2&2 2
5140	85,230	2OV1SYUS&N2&2
5141	85,230	4OV1SYUS&N1&1
5142	85,229	4N4&YUS&S1VO2
5143	85,230	2OV1SYUS&N1&1
5144	88,126 230	GR DOV1SYUS&N2&2

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5145	88,126 229	GR DOV1SYUS&N4&4
5146	88,125 223	G 5-R FS1VO1
5147	51,127 223	G 5-R FS1VM4
5148	237	SUYMR&M18
5149	236	12MYUS&M2U1
5150	236	18MYUS&M2U1
5151	135	T5M CN BUIJ B11
5152	59,134	T5N CN AUTJ B17 C2Z
5153	54, 73	14M 4B &G
5154	25, 56	QY2&2M14
5155	25, 56	QY2M14 &QV2 &QH
5156	76,110	GR CG EMVOY
5161	160,180 187	T5OVTJ D2V1 E E
5162	87,125 160	T5OTJ BVO8 BG CG DG EG
5163	18, 91	QVYO1R
5164	161	T56 A CO GUTJ D D H
5165	161	T C364 A DOTJ A A C
5166	24	L46 A EUTJ A A E GQ
5167	58, 82	2Y2&UY2ZVO1
5168	16	L4TJ A1VQ B B C1VQ
5169	21,160 187	T5OVTJ D4VQ E E
5170	117,231	GR BG DG EG COVS2U1
5171	40, 82	2CVVMR
5172	151,242	T5MNNNJ EMVZ
5173	48, 79	ZMVMMVZ
5174	77,149	T5MNNNJ EMVO2
5175	151,199	T56 BNONJ BO H INW
5176	77,144	T6NJ BMVOY C
5177	77,144	T6NJ BMVOY D
5178	77,144	T6NJ BMVOY E
5179	77,144	T6NJ BMVOY F
5180	79,202	WNR CNW DOVO2U1
5181	77,159	T5CJ B1OVMR
5182	73	1UU1XOVMR
5183	75, 82	2OVXOVMR
5184	75, 82	4OV2OVMR
5185	74	RMVO2R
5186	78, 89 195	NCR CMVOYVO4
5187	21, 72	L4TJ B B C1VQ AY&UN 2
5188	26, 75	QY1OVM16 &Q1YOVM16
5189	74	RMVOX&&1 2UU
5190	59,134	T5NN DMJ CZ EZ & 2QVVQ

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5191	60,149	T5MNNNJ EZ
5192	104,134	T5MNNNJ EMYZUM
5193	115,198	WNR-/G 5
5194	115,198	WNR BG CG DG EG
5195	78,129 144	T6NJ BMVOY EG
5196	115,208	L B666J XQ XG
5197	245	T56 BO DO CHJ G1U2
5201	87,100 124	GR DOVR BO2
5202	87,125 162	T56 BO DO CHJ G1OVR DG
5203	82,111	ER DOVR
5204	80	L66J BOVR
5205	82, 93	1U2R CO1 DOVR
5206	82,111	5VO1R CG DG
5207	87,100 125	E1VO3O3OR
5208	82,111	G2OV9U1
5209	82,111	L6TJ AOVR BG
5210	80	L6TJ AOV9U1
5211	158	T6O COTJ B9 D3 E2
5212	158	T6O COTJ B9 D D F
5213	119,233	SHR-/G 5
5214	176	L50J 0- 2-FE-
5215	83,159	T5OJ BVO2
5216	24	1Y&1XQ&1 2UU
5217	24	QX2&&1UU1XQ2
5218	80	17VO1U1
5219	24	QX&&1UU1XQ
5220	177	L46 A EV FUTJ A A G
5221	97,211	2U1R DQ CO1 EO1
5222	207	QR BQ D1Y& 2
5223	34	L5UTJ A D1VH E E
5224	24	L6UTJ A DXQ FQ
5225	24	L6UTJ A DXQ FQ
5226	24	L6UTJ A DXQ FQ
5227	24	QX3&&1UU1XQ3
5228	117,228	GR DSWOR DG
5229	117,228	GR DSWOR BG
5230	117,228	GR DSWOR DE
5231	27,106	Q1R BG DG
5232	27,106	Q1R CG DG
5233	103,131 184,214	G2VR DQ CO1
5234	102,129 183	EY&VR CO1 DO1
5235	215	L B656 HHJ HPO&O1&O1
5236	215	1X&&1Y&2O 2PQO

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5237	27,107	GR DXQR DG&1UU1
5238	74	2OVMR BR
5239	137,209	L66J CQ B1- AT6NTJ
5240	74,142	T6NTJ AVOY
5241	37	L55 ATJ C C D1VZ
5242	74	1YOVMR C1U1
5243	74,142	T6NTJ AVOY B E2
5244	74	1Y&OVNR&2U1
5245	74	2U2NR&VOY
5246	74,142	T6N DNTJ AVOY B DVOY E
5247	78, 89 102	4OVY&OVMR C FO1
5248	37	L55 ATJ C C D1VMR
5249	118,238	MUYZS1R BG DG &GH
5250	154,239	T5MYMY EHJ BUS DUS E E
5251	59,143	T56 BM DN FN HNJ GN2&2 IN2&2
5253	53	L46 A EUTJ A A E GZ
5255	78,100 124	G2OVMR C FO1
5256	78,100 124	GR CMVO2OR BG DG
5257	75,109	1Y&OVMR BG D- 2
5258	23,153 237	T5SYMV EHJ BUM E1VQ
5259	140,153 172	T56 BVNVJ C1- ATN DOTJ
5260	61,141 171	T56 BVNVJ C1MR C
5261	66, 99 140,174	T56 BVNVJ C1MR DO2
5262	61,139 171	T56 BVNVJ C1MR
5263	61,141 171	T56 BVNVJ C1MR B D
5264	67,123 140,174	T56 BVNVJ C1MR DI
5265	67,123 139,174	T56 BVNVJ C1MR CE
5266	61,139 171	T56 BVNVJ C1MR DR
5267	61,141 171	T56 BVNVJ C1MR B E
5268	66, 99 140,174	T56 BVNVJ C1MR DO1
5269	51, 69 140,174	T56 BVNVJ C1MR DMV1
5270	157,167 187	T66 BOVJ E GQ IQ
5271	210,221	L6V DVJ BQ EQ

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5272	28,178	L6VTJ B1Q B1Q F1Q F1Q
5273	162,167 187	T66 BOVJ D1R& E IQ
5274	95,179	1OR DVY2&U1R DO1
5275	161,187 211	T56 BVO DHJ D- D-/R BQ DQ FQ C 2
5276	132,182 242	T6MVMVVVJ
5277	222	ZVMNUY2
5278	222	L6YTJ AUNMVZ
5279	66,100 203	WNR BZ EO2
5280	132,167 242	T6VMVMV FHJ FQ F- 2O
5281	62,197	WNR CZ F ENW
5282	62,197	ZR CZ D ENW
5283	39	1Y&MVVMY
5284	77,144	T6NJ B2OVMR
5285	39	RMVVMR
5286	75, 93	RO1YOVMR
5287	232	SCNR
5288	76,110	G1U1OVMR CG
5289	166,216	2CPO&O2&MMR
5290	75,109	GR CMVOY1G1U1
5291	77,110	GXGGXOVMR CG
5292	75,109	G1YGY1GOVMR
5293	79,103 131,195	NC2O2OVMR CG
5294	78, 86 124	G2OVYOVMR CG
5295	63,227	ZR DMR DZ BSWQ
5296	76,110	L56T&J FOVMR CG
5297	76,110	L56T&J GOVMR CG
5298	78, 86 124	GR CMVOYVOR
5300	89,130 159,206	T5OJ BNW E1OVR DG
5301	89,130 159,206	T5OJ BNW E1OV1E
5302	90,130 159,206	T5OJ BNW EOV2
5304	15,106 161	T56 BVOVJ-/G 4
5305	94,158	T5OJ B1O2
5306	83,159	T5OJ B1OV1
5307	83,159	T5OJ BYOV3&OV3
5308	83,159	T5OJ B1OV3
5309	94,158	T5OJ B1O1

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5310	162,183 204	T5OJ BV2 ENW
5311	32,159 205	T5OJ ENW E1Q
5312	69,144 162	T6NJ BM1- ET5OJ
5313	35,158 205	T5OJ BVH ENW
5314	160,180	T5OJ BV1
5315	162,180	T5OJ BV2
5316	19,159	T5OJ B1U1VQ
5317	158,199	T5OJ BNW
5318	161,180	T5OJ BVR
5319	83,159	T5OJ BYOV1&OV1
5320	101,158 203	T5OJ ENW E1O1
5321	48,231	ZVMMYUS&MZ
5322	229,231	ZMYUS&MMYZUS
5323	231	ZMYUS&MZ
5324	78,212 221	L C666 BV IVJ DQ GMVO1
5325	143,167	T6NNJ CQ D FQ
5326	42,107	GR CMV1U1
5327	32, 69 137,174	T5VNVJ A- AL6TJ CN2Q2Q
5328	38, 44 133	T3NTJ AV 23
5329	147,185	T5NVTJ A1U1
5330	30, 65 211	Q2M1R BQ
5331	82, 93	2CVYVO2&1O2
5332	25, 57	Q2N2QR B E
5333	30, 65 119	Q2N2QR CG
5334	30, 65 120	G1YQ1N2&R C
5335	49, 86 194	2OVYCN&U1R DMV1
5336	48	ZVMV3VMVZ
5337	21,226	QV3SW 23
5338	113,139 172	T56 BVNVJ C2E
5339	15,106 157	T C555 A AO DVOVTJ IG JG
5340	60,151	T5NN DNJ C DZ E
5341	74	RMVO1 2X
5342	46,178	1V1VM 22
5343	68, 88 127	GR CM1UYVO2&VO2

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5344	78,212 221	L C666 BV IVJ DQ GMVO5
5345	155,239	T5SYNV EHJ BUN4 C4
5346	83,146	T5NJ BVO2 C DVO2 E
5347	83,144	T6NJ B CVO2 EVO2 F
5348	46,178	1V1VM 2 CR D
5349	105	L66J C1G
5350	105	GXR&R&R DR
5351	20,207	QR BVO-AG-
5352	16	L66J B3VQ E- AL5TJ
5353	71,179	L66J CV2N1&1 &GH
5354	35	RMV1R
5357	217	16M1R &.H-P-F6
5359	235	MUYZS1R &.H-P-F6
5366	81	1U2OV 3/1Y1/
5367	158	T6O COTJ B- BT5OJ
5368	158	T5O COTJ B2 B D
5369	158	T6O COTJ B1U1R
5370	32, 89 128	QYR&VO2G
5371	112,158	T5O COTJ BR DG& D
5372	112,158	T5O COTJ BR BG& D
5373	80	5VO2UU1
5374	158	T6O COTJ E E B- BT6OTJ
5375	158	T6O COTJ C E B- BT6OTJ
5376	158	T6O COTJ D B- BT5OJ
5377	158	T6O COTJ B2 B D
5378	158	T5O COTJ D B- BT5OJ
5379	158	T5O COTJ D E B- BT5OJ
5380	158,199	T6O COTJ B2 B ENW E
5381	37	VHMX
5382	112,158	T5O COTJ BR BG& D E
5383	83,162	T56 BO DO CHJ GY1R&OVH
5384	82, 93	RO2OV1OR
5385	112,158	T6O COTJ BR DG& D
5386	87,125 160	T5OJ BVO8 BG CG DG EG
5387	29,216	Q1 4P &G
5388	224	R1SS1R
5389	161,167 184,214	T66 BO EVJ CR DQ& GQ IQ
5390	34	VH1U1R
5391	28,227	WSO&1Q &-NA-
5392	140,169	T56 BVNVJ C- BL66J
5393	61,178	ZR DVR DZ
5394	132,173 209	T C555 A DVNV IUTJ ER DQ
5395	154,219	T56 BK DSJ B C &WSO&O1

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5396	97,154 238	T56 BN DSJ CZ GO1 HO1
5397	161	T36 BOTJ A EYU1
5398	177	L46 A EVTJ A A G
5399	177	L46 A EVTJ A A G
5400	177	L46 A EVTJ A A G
5401	16	L5UTJ A D1VQ E E
5402	20,178	QV8UU2V6
5403	20,178	QV7V1U1V6
5404	22,161 182	T3OTJ BV7VQ CV6
5405	20,178	QV8U2V6
5406	20,178	QV9U1V6
5407	20,178	QV7V2V6
5408	22,161 182	T3OTJ BV6 C8VQ
5409	22, 32 183	QV7VYQYQV6
5410	102,128 228	GR DOSWR DO1
5411	152,193	T6N DOTJ A2CN
5412	63,208	ZR CQ EQ
5413	152	T6N DOTJ A- 24
5414	61,178	T B656 HVJ EM1
5415	151,180	T6N DOTJ A- 2 B EL6V DVTJ
5416	45,178	L B656 HVJ EMV1
5417	83,153	T6N DOTJ AXVO2&1VO2&1VO2
5418	83,152	T6N DOTJ AYVO4&1VO4
5419	85,218	1VO2K&& 25 &I &I
5420	28,217	Q2K&&10K2Q &E &E
5421	83,153	T6N DOTJ AXVO2U1&/1VO2U1 2
5422	46,178	L B656 HVJ EMVR
5423	28,217	Q2K&2Q& 210 &E &E
5424	141,173 180	L B656 HVJ E- CT56 BVNVJ
5425	38	L6TJ AMV 28
5426	42, 92	1OR BO1 D2MV 28
5427	38	L6TJ A- 2NV 28
5428	55	1N1&2 2U
5429	68,149 195	T6N CN ENJ BZ DZ F2 2XR&CN
5430	101,126 134,239	T5M CN BUTJ BS2O2G &GH
5431	97,135 238	T5N CN AUTJ BS1O1 C1O1
5432	70,130 214,223	1N1&1R BQ CSR BQ EG C1N1&1
5433	182,225	L B656 HVJ EN1&SWR D

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5434	127,213 224	QR DG BSR BQ EG &1M1
5437	19,106	QVYGU1G
5438	82,111	1U2OVYG 2U
5439	79,111	GR BG DG EOVO1
5440	38	L6TJ AMVY
5441	44,108	GR CMVXFFXFFXFFF
5442	118,232	SCNR CG
5443	73	1OVM 2 CR
5444	88,126 230	E2OVYUS&M 22
5445	21,229	QV1SYUS&N2&2
5446	241	L6TJ AMVM1Y4&2
5447	241	1N1&VM 2 CR
5448	237	SUYZM 2 DR
5449	236	L6TJ AMYUS&M2
5450	235	MUYZS2 2U &EH &EH
5451	118,238	MUYZS1R DG &EH
5452	48,240	1VM2MYUS&S 2
5453	113,137 172	T5VNVJ BR& DG EG
5454	23, 33 134,239	T5M CN BUTJ BSYQVQ &GH
5455	134,231 239	T5MYNTJ BUS CYUS&S1
5456	48,155 231	T5NYSTJ AVM2 BUS
5457	154,231	T5SYNV EHJ C- 26
5458	128,154 233	T56 BN DSJ CSH HG
5459	76,110	GR CMVO2U1
5460	77,110	G1YOVMR C
5461	58, 75	ZR CMVOY
5462	76,110	GR BMVOY
5463	77,198	WNR DMVOY
5464	76,110	GR CN1&VOY
5465	77,110	G1YOVMR CG
5466	73	2U2OVMR
5467	75,109	GYU2OVMR
5468	58, 75	2N2&2OVMR
5469	74	4Y2&1OVMR
5474	30, 78 120	GXGGYQMVOY
5475	73	1MVOR
5476	76,109	GR DOVM2
5477	77,198	WNR DOVM2
5478	74	ROVMR
5479	76,109	GR DOVN1&1
5480	73	3N3&VOR

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5481	229	2MVSR
5482	76,110	FXFFR CMVOY
5483	40, 82	2OVVMR
5484	84,166	1YOVMMR
5485	21, 48	QV1U1VMR CG
	119	
5486	118,239	SUYZMR CG
5487	23	Q2U1R
5488	163,231	T5SYSTJ BUS
5490	105	GX&&2XG
5491	24	1Y&XQY&&1 2UU
5492	18, 91	QV1U1R DO1
5493	24	QXR&R&R DR
5494	28,178	QXV1
5495	24	QX2&2&1UU1
5496	159,180	T5O CVTJ B B E E
5497	34	VHYU1R
5498	16	QVYU1R
5499	24	QX&&1UU 22
5500	24	QX2&&2YU2
5501	24	QX2&&1U1XQ2
5502	18, 91	QVYU1R BO1
5503	24	QX7&1UU1
5504	24	QXR&&1UUXQR
5505	24	QX6&&1UU1XQ6
5506	24	QX7&&1UU1XQ7
5507	24	QX9&&1UU1XQ9
5508	21,231	QV1S 2YUS
5509	82,111	2OVYGU1OVR
5510	69,175	L66 BV EYJ CZ EUM &GH
	222	
5511	18, 39	QV1MV1R
5512	71	ON1&1&1 &QH &QH
5513	20,196	WNR X1U1VQ
5514	45,165	ZMV1MV1R
5515	49, 86	2OVYCN&MV1R
	194	
5516	22, 51	2OVYVO&MV1R &-NA-
	89	
5517	168	L B666 FYT&&J FUNQ
5518	40, 81	2OV1MV1R E D F
5519	46,191	NC1MVYR&R
5520	64,237	Z2SYZUM &EH &EH
5521	23, 52	SHX&&YVQMV1
	234	
5522	105	L C666J EG
5523	177,189	1V1UY2&O 2-NI-
5524	95,179	2VR CO1 DO1

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5525	22, 89 102	QV1U1R CO1 DOV1
5526	16	L6UTJ C3 DVQ F1U8VQ
5527	163,226	T5SW CUTJ
5528	23,104 214,234	SUYVQ1R DQ CO1
5529	140,173 209	T56 BVNVJ CR BQ
5530	141,169	T56 BVNVJ CR C
5531	21, 48 204	WNR BMVR BVQ
5532	21, 48 202	WNR DMVR BVQ
5533	18, 39	L66J BMVR BVQ
5534	23, 69 213	ZR CQ EQ DVQ & 2 &.H2-S-O4
5535	77,148	T66 BNJ JOVMR
5536	164,194	ZMV1CN
5537	73	1OVMMVO1
5538	77,162	T6OTJ B1OVMR
5539	74	L6TJ A A COVMR& E
5540	74	L6TJ A A COVMR& E
5541	74	1Y&1YOVMR&1Y
5542	83,133	T C566 BN HNT&&J DVO2 FVO2
5543	89,174 183	L5VYTJ BUNR& CVO2 EVO2
5544	73	RMVO2 2UU
5545	70,103 132,218	T6N CNTJ BN1R&2K16 &E
5546	154	T56 BNSNJ
5547	155,229	T5MYSTJ BUS D
5548	155,229	T5NYSTJ AY BUS
5549	155,229	T5NYSTJ A1Y2&2 BUS
5550	166,227	ZMR DSWQ
5551	115,198	WNR BG CG FG ENW
5552	149,219 240	T5M CNJ BSH D1YVO&K
5553	76,100	GR CMVO2UU1
5554	87,125 166	GR CG EG BMMVOY
5555	102,154 214,231	T5MVYSYJ CU1R DQ CO1& EUS
5556	20,154 184	T66 BMV ES DHJ D1VQ D1VQ
5557	115,199	WNR CNW ENW B1U1R BG
5558	219,227	WSQR CKN F1 2U &G &G
5559	76,110	GR CMVOYR
5560	76,110	L6TJ AOVMR CG& A1UU1

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5561	89,205 224	WNR DVO2S 2
5562	76,110	GR CMVO1YGU1
5563	46,191	ZV1CN
5564	156,185	T B666 HOVJ
5565	244	T5M CN BUTJ &TALL OIL ACIDS
5566	244	T5M CN BUTJ &COTTONSEED ACIDS
5567	244	T5M CN BUTJ &TALLOW ACIDS
5591	60,150	T6N CN ENJ BZ DZ F2R
5595	60,150	T6N CN ENJ BZ DZ F1N1&1
5596	60,150	T6N CN ENJ BZ DZ F2N1&1
5597	60,150	T6N CN ENJ BZ DZ FX2&&N1&- BT6N CN ENJ
5598	60,150	T6N CN ENJ BZ DZ F- 2/X2&&N4&/
5599	60,150	T6N CN ENJ BZ DZ F- 2/X&&N4&/
5600	60,150	T6N CN ENJ BZ DZ F- 2/Y2&N1&/
5601	66, 99 150	T6N CN ENJ BZ DZ F- AL6TJ AOYO2
5603	60,150	T6N CN ENJ BMY DMY FMY
5604	68,150 195	T6N CN ENJ BZ DZ FN1&Y2&CN
5605	60,150	T6N CN ENJ BZ DZ F- 2M
5606	68,150 195	T6N CN ENJ BZ DZ FN1&- AL6TJ ACN
5607	60,150	T6N CN ENJ BZ DZ F- 2/X&&N1&/
5608	68,150 195	T6N CN ENJ BZ DZ FN1CN&X&&1X
5609	66,123 149	T6N CN ENJ BMX&&1X DMX&&1X FG
5610	60,151	T6N CN ENJ BM8 DM8 FM8
5611	66,123 149	T6N CN ENJ BM1Y DM1Y FG
5612	66,123 150	T6N CN ENJ BMX DMX FG
5613	67,123 150	T6N CN ENJ BMR& DG FG
5614	67,123 150	T6N CN ENJ BZ DZ FG
5615	68,139 182	T6N CN ENJ BZ DZ FX1V1
5616	66, 99 150	T6N CN ENJ BZ DZ F1OYO4
5619	69,142 185	T6N CN ENJ BZ DZ F- DT6MV DNTJ C C
5620	70,131 142,185	T6N CN ENJ B- DT6NV DNTJ AG C C
5622	118,238	MUYZS1R CG DG
5623	118,238	MUYZS1R BG DG
5624	118,238	MUYZS1R CG DG
5625	118,238	MUYZS1R BG DG

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5626	118,238	MUYZS1R CG DG
5627	118,238	MUYZSR CG & 2SUYSHM 22
5628	236	MUYZS16 &L6TJ AR BQ CNW ENW
5629	235	MUYZS2U1 & 2 &.H2-SI-F6
5632	29,237	MUYZS1O 22 &GH &GH
5633	235	MUYZSV11 &GH
5634	86,238	MUYZSVO2 &WNR BQ CNW ENW
5635	47,237	ZV1SYZUM &GH
5636	118,238	GR BG D1SYMR&UNR
5637	134,235	T5M CN BUTJ BS10 &EH
5638	135,235	T5M CN BUTJ BS2U2X&&1X
5639	135,235	T5M CN BUTJ BS14 &EH
5641	135,235	T5M CN BUTJ BS18
5642	118,134 238	T5M CN BUTJ BS1R BG &GH
5643	118,134 238	T5M CN BUTJ BS1R DG &GH
5644	118,135 238	T5M CN BUTJ BS1R CG DG &SHCN
5645	118,135 238	T5M CN BUTJ BS1R CG DG
5646	118,135 238	T5M CN BUTJ BS1R CG DG & 2 &.H2-SI-F6
5647	69,128 134,239	T5N CN AUTJ BS1R CG DG& C2Z &GH
5648	47,131 237	T5M CN BUTJ BS1VZ &WNR BQ CNW ENW
5649	118,135 238	T5M CN BUTJ BS1R CG DG &WNR BQ CNW ENW
5650	118,135 238	T5M CN BUTJ BS1R BG DG
5651	127,134 160,239	T66 BO DOT&J HG J1S- BT5M CN BUTJ &GH
5652	127,134 160,239	T66 BO DOT&J HG J1S- BT5M CN BUTJ
5653	135,235	T5M CN BUTJ BS 22 &EH &EH
5654	97,133 238	T5N CN AUTJ CV2 BS2 2O
5655	118,135 235	T5M CN BUTJ BS 2/Y1U1&1/
5656	97,135 238	T5M CN BUTJ BS2O2OR
5657	97,135 238	T5M CN BUTJ BS2O2OR D8
5658	29,133 237	T5M CN BUTJ BS2Q &GH
5659	128,133 230,239	T5N CN AUTJ BS18 C2MYUS&S1R CG DG

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5660	128,134 225,239	T5N CN AUTJ BS1R CG DG& C2MSWR CG DG
5661	96,232	NCS2O2SCN
5662	96,232	NCS2O2O4
5663	85,232	NCS2OV11
5664	96,232	NCS2O2OR D8
5665	102,204 233	NCS2OR BNW DX2
5666	102,204 233	NCS2O2OR XNW DY2
5667	101,126 233	NCS2OR DG
5668	85,232	NCS1OVR
5669	69,129 233	NCSR CG DN1&1
5670	47,232	NCSR DMV1
5671	86,232	NCS2VO1
5672	86,232	NCS2VO2
5673	86,232	NCS2OV7
5674	85,232	NCS1VOY&1Y
5675	96,232	NCS2O 22
5676	101,126 233	NCS2O2O 2Y1YG
5677	102,215 233	NCS2O2O 2PQ
5678	33,103 130,215 233	NCS2O2O 2PO&YQXGGG
5679	33,103 130,215 233	NCS2O2O 2PO&YQXGGYG
5680	64,233	NCSR DN1&1 &WSQR D
5681	149,170	T5VMVTJ D
5682	149,170	T5VNVTJ B1Y4&2 D
5683	148,170	T5VMVTJ D D E1R
5684	149,170	T5VNVTJ C1U1
5686	113,141 172	T56 BVMVJ-/G 4
5687	113,139 172	T56 BVNVJ CYR DG&R DG
5690	235	MUYZS10 &EH
5691	235	MUYZS2U1 &GH
5692	235	12SYM1&UN1 &QVR BQ
5693	149,170	T5VMVTJ D D E E
5694	69,149 226	T6N CN ENJ BMSWR& DR
5695	32, 69 133,239	T6N CN ENJ BZ DZ FS2Q
5696	236	MUYZS14 &EH

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5697	235	2U1SYMR&MR &EH
5698	101,126 134,239	T5M CNJ BS2O2G
5699	49, 65 151	T6N CN ENJ BZ DZ F1VZ
5700	68,150 195	T6N CN ENJ BZ DZ FR CCN
5701	49, 65 149	T6N CN ENJ BZ DZ FM2MV1
5702	60,150	T6N CN ENJ BZ DZ FM4
5703	60,150	T6N CN ENJ BZ DZ FM8
5704	64,237	MUYZS2N1&1 &GH &GH
5705	224,239	MUYZS1 2S &GH &GH
5706	235	MUYZS 2 &/WNR BQ CNW ENW 2
5707	97,238	MUYS1&N1&2O1U1 &IH
5708	235	12SYM1&UN1 &GH
5709	235	18SYM1&UN1 &EH
5710	236	4NUYS4&M4 &EH
5712	235	8SYM1&UN1 &EH
5713	235	14SYM1&UN1 &EH
5734	237	SUYN1&M12
5735	236	12MYUS&M12
5736	236	12MYUS&M4
5737	145	T6N CN AU CUTJ B11
5738	145	T6N CN AU CUTJ B17 D
5739	59,145	T6N CN CUTJ A3Z B17
5740	135	T5M CN BUTJ B11
5741	27,133	T5N CN AUTJ B17 C2Q
5748	44,109	GR DMVY
5749	50,122 182	FXFFV1VMR
5750	115,192	NCYCN&U1R BG
5751	164	RMMV2VMMR
5752	58, 82	1U2OV1UYM1
5753	18, 56	QVYR&M1VQ &QV1NR&1VQ
5754	22, 51 226	VHM2SW3VQ
5755	26, 75	Q1X1MVO2
5756	181,193	NC1VY
5757	211,242	QR DN1&VMR
5758	44,109	GR DMVY
5759	73	2U2OVMR
5760	60,150	T6N CN ENJ BZ DZ F
5761	69,150 228	T6N CN ENJ BZ DZ F2SWO &-NA-
5762	193,201	WNR C1UYCN&CN
5763	44,108	VHMR CG DG
5764	76,110	GR CG DOVMR
5765	115,192	NCYCN&U1R DG

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5766	137,185 202	T566 1A L CMVJ JNW
5767	60,150	T6N CN ENJ BZ DZ F17
5768	61,136 171	T5VNVJ BMR
5769	50,122 202	VHMR BG DNW
5770	45,165	1U2MVVMMR
5774	83,159	T5OJ BYOV1&OV1
5775	19,159	T5OJ B1U1VQ
5776	160,180	T5OJ BV1
5777	19,161	T5OJ B1UYVQVQ
5778	158	T5OTJ B2 B E2 E
5779	89,159 183	T5OJ B1UYV1&VO2
5780	83,159	T5OJ BYOV2&OV2
5781	83,159	T5OJ BYOV3&OV3
5782	22,119 160	T5OJ BVQ EE
5783	22,119 160	T5OJ BVQ EG
5784	22,160 205	T5OJ BVQ ENW
5785	88,160 203	T5OJ BVO3 ENW
5786	158,222	T5OJ B1UNMVZ
5787	88,159 203	T5OJ BYOV1&OV1 ENW
5788	35,158 205	T5OJ BVH ENW
5789	32,159 205	T5OJ BNW E1Q
5790	88,159 203	T5OJ BNW E1OV1
5791	158,199	T5OJ BNW
5792	88,160 203	T5OJ BVO1 ENW
5793	222	ZVVMZ
5794	64,134 241	T5NVMV EHJ AZ &GH
5795	157,166 186	T5NVOTJ AZ &GH
5796	84,165	ZM1VO1 &GH
5797	29,222	ZVNZ2Q &GH
5798	157,166 186	T5NVOTJ AZ D &GH
5799	158,168 205	T5OJ ENW E1UNQ

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5800	162,183 204	T5OJ EV2 ENW
5801	23, 33 70,259	T5OJ BYQYZVQ
5802	156,183 204	T5OJ BNW E1U1V1
5803	69,144 162	T6NJ BM1- BT5OJ
5804	88,159 203	T5OJ BYOV2&OV2 ENW
5805	77,135	T5N CN AUTJ BAUA C2OVMR
5806	165	ZM2 &QVVQ
5807	61,166	ZM2Z &QVVQ
5808	165	ZMY &QVVQ
5810	165	ZM4 &QVVQ
5811	165	ZM5 &QVVQ
5812	155,229	T5N CS AUTJ BSH E E
5813	166,193	ZM2CN &.H2-S-O4
5814	153,229	T5N CO AUTJ BSH E2
5815	15,160 205	T5OJ BVG ENW
5816	18, 39	L66J CMVR EVQ
5817	60,151	T5NN DNJ DZ
5818	97,234	SUYZMNU1R DO1
5819	42,107	1XMV1 & 2IH &II
5820	38	2N2&VR C
5821	81	1U2OV1YVO2U1&U1VO2U1
5822	228	OS1&1
5823	113,136 172	T5VNVJ B2U1 DG EG
5824	113,137 172	T5VNVJ B DG EG
5825	113,137 172	T5VNVJ B2 DG EG
5826	113,137 172	T5VNVJ B3 DG EG
5827	113,137 172	T5VNVJ B1Y DG EG
5828	113,137 172	T5VNVJ B6 DG EG
5829	113,137 172	T5VNVJ B10 DG EG
5830	102,128 137,174	T5VNVJ B2O1 DG EG
5831	113,137 172	T5VNVJ B1Y4&2 DG EG
5832	51,128 136,174	T5VNVJ B2MV1 DG EG

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5833	113,136 172	T5VNVJ B1R& DG EG
5834	113,137 172	T5VNVJ B2R& DG EG
5835	113,137 172	T5VNVJ DG EG B- AL6TJ
5836	113,137 172	T56 BVNVJ BR B& DG EG
5837	113,137 172	T5VNVJ BR C& DG EG
5838	113,137 172	T5VNVJ BR D& DG EG
5839	19,106	QVYGUYGVO
5840	137,169	T5VNVJ CR B
5841	129,143 166	T6VMMVJ EG FG
5842	42,107	G1UYGVMR CG
5843	141,169	T56 BVNV GUTJ C2
5844	132,169	T C555 A DVNV IUTJ E2
5845	112,132 172	T C555 A DVNV IUTJ AG AG BG E2 HG IG JG
5846	139,161 172	T C555 A AO DVNVTJ E2
5847	44,108	GY&XGGVMR CG
5848	44,109	GR CMVY
5849	38	1YVMR
5850	37	3VMR
5851	132,169	T C555 A DVNVTJ E1Y4&2
5852	81	L55 A CUTJ FVO4 GVO4
5853	81	1U2OV 2 BR
5854	155,180	T56 BO DO CHJ G1U1V1
5855	160,180	T56 BO DO CHJ G1U1V5
5856	44,156	T56 BO DO CHJ GVN3&3
5857	44,156	T56 BO DO CHJ GVN2U1&2U1
5858	165	ZN4&4
5859	165	ZN5&5
5860	165	4Y2&1 2NZ
5861	58,109	ZR CG
5872	163,226	T5SW CUTJ C
5873	147,241	T66 BMVMVJ
5874	144,199	T6NJ C- ET5MN BUTJ CNW
5875	241	1U2MVN1&1
5876	61,168	QNU1X&&N1&1
5877	77,151 198	T56 BMVOJ GNW HNW
5878	32, 68 89	Q2N2QR DVO2
5879	139,161 172	T C555 A AO DVNVTJ E- BL66J

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5880	21, 48 161	T55 A AOTJ CVQ DVM- BL66J
5881	52,118	MUYZR DG &GH
5882	62,191	NC2N2CN& 22
5883	60,151	T5NN DNJ C DZ E &GH
5884	60,151	T5NN DNJ C2 DZ E2
5885	118,134 242	T5NVNV EHJ AG CG E E
5886	118,242	GR DMVMR DG
5887	118,242	ZVMR DG
5888	118,134 242	T5NVNV EHJ AE CE E E
5889	154,225	T56 BSWNVJ C
5890	32,121 243	GXGGYQMVMR C
5891	32,121 243	Q2N2QVMR CG
5892	217	12R X1K2&2&2U1 &.P-F6
5894	218	1X&&1X&&2U2 2K &G
5896	218	12R X1K &G
5897	16	OV1U1R &-NA-
5898	80	1OV1U1R
5899	16	QV1U1R
5900	80	R2OV1U1R
5901	16	QV1U1R DY
5902	87,100 213	1OV1U1R DQ CO1
5903	87,100 213	2OV1U1R DQ CO1
5904	82, 93	1VOR BO1 D1U1VO1
5905	82, 93	2OV1U1R CO1 DOV1
5906	84,192	2OVYCN&U1R
5907	85,198	WNR D1U1VO1
5908	23,104 168,214	QNUYVQ1R DQ
5909	168	1YUNOVMR
5910	88,102 195	NC1R CO1 DOV1
5911	77,144	T6NJ COVMR
5912	72	L5TJ AOVMR
5913	74	1UU1X2&OVMR
5914	74	1Y&U3X1U1&OVMR
5915	74	1Y&1XOVMR&1UU1&1Y
5916	75, 82	4OVYR&OVMR
5917	75,109	GR CMVOY&Y
5918	78,129 243	GR CMVO2 2NVMR CG
5919	105	L66J C1G

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5920	157,167 186	T5OVTJ CQ DQ D
5921	158	T6O COTJ BY E E
5922	149,170	T5VMVTJ D D E E
5923	37	VHM6MVH
5924	73	1Y&OVMX&&1X
5925	74	1Y&U3Y&U2OVMR
5926	46,178	1V1VMR D- 21
5927	62,192	NCX&&M2MXCN
5928	174	1X&&XNU1R
5929	86,234	SUYZMNUY1VO2
5930	76,110	GR DG BMVO2UU1
5931	49, 86 121	GR CMVVOY
5932	76,110	GR CMVOX2
5933	76,110	GR CMVOY3
5934	76,110	GR CMVO1Y2
5935	69,149 226	T6N CN ENJ BZ DMSWR& F
5936	79, 90 103,130	GR CG DO2OVYOVMR CG
5937	17	QVR BR BVQ
5938	27,106	Q1XFFXFFXFFYFF
5939	27,106	Q1/XFF/ 5YFF
5940	27,106	Q1/XFF/ 7YFF
5941	15,106 156	L55 A CX FUTJ AG AG BG EG FG GG C-& DT5VOVX EHJ
5942	27,106	Q1XFFYFF
5943	50, 99 212	1OR DQ CVM1
5944	21, 48 139,161	T55 A AOTJ CVQ DVM- CT5NN DMJ
5945	151,242	T5MN DN EHJ C DMVMR& E
5946	47,208	ZVR BQ CR
5947	151,242	T5NN DNJ C2 DMVMR D& E2
5948	72,229	SUYS&M 22 & 3-BI- 2
5949	229,243	1X&&1Y&2MYUS&S 2-ZN-
5950	236	L D6 C555 A &TTTJ MMYUS&MX
5951	129,205 224	L6TJ ASR BNW DNW& BG
5952	54	4MR &GH
5953	54	1V1VMR BR
5954	55	ZR D &GH
5955	58, 93	ZR BO1 &GH
5957	39	L6TJ AMV 2 BR
5958	39	5MVR BVM5
5959	39	5NR&V 2 BR
5960	39	4NR&V 2 BR
5961	42, 92	1OR DMV 2 BR

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5962	47,197	WNR BMV 2 BR
5963	44,109	GR BMV 2 BR
5964	39	1Y&MV 2 BR
5965	39	3MVR BVM3
5966	39	R1MVR BVM1R
5967	47,197	L6TJ AMV 2 BR CNW
5969	47,197	5MVR CNW BVM5
5970	47,197	5NR&V 2 BR CNW
5971	47,197	4NR&V 2 BR CNW
5972	49, 99 202	1OR DMV 2 BR CNW
5973	139,165 200	T66 BVMMVJ GNW
5974	140,169	T56 BVNVJ CY6
5975	113,139 172	T56 BVNVJ C2E
5976	140,169	T56 BVNVJ C- 22
5977	140,173 194	T56 BVNVJ C3CN
5979	19,132 171	T56 BVNVJ C3VQ
5980	140,173 200	T56 BVNVJ C2 FNW
5981	140,173 200	T56 BVNVJ C FNW
5982	141,173 200	T56 BVNVJ C3 FNW
5983	140,173 200	T56 BVNVJ CY FNW
5984	140,173 200	T56 BVNVJ C8 FNW
5985	140,173 200	T56 BVNVJ C6 FNW
5986	140,173 200	T56 BVNVJ C5 FNW
5987	28,140 171	T56 BVNVJ C2XQ
5988	55	R1M2M1R
5989	62,191	NCYR&1N1&1 &GH
5990	194,223	NCYR&1S4
5991	142,193	T6NTJ A1YR&CN &GH
5992	62,191	L6TJ AM1YR&CN &GH
5993	62,191	NCYR&1M1R &GH
5994	136,234 242	T6MVMVJ ESH
5995	143,239 242	T6MVMVJ ESYZUM &GH
5996	23,131 148,167	T66 BNJ DVQ EQ IG

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5997	79, 90 103,130	GR CG DO2OVYOVMR C
5998	240	F-SN-F1&1
5999	177	RV1U2U1R
6000	176	1V1U1R
6001	177	1V1VR
6002	181,210	QR B1U1V1
6003	95,179	1V1U1R DO1
6004	177	R1V1R
6005	28,178	Q1VR
6006	15,157	T56 BVOV GUTJ
6007	16	L6UTJ C4 DVQ EVQ F1U8VQ
6008	83,161	T36 BOTJ D4 EVO2 FVO2 G- BT3OTJ C7VO2
6009	83,161	T36 BOTJ D4 EVO2 FVO2 G- BT3OTJ C8VO2
6010	114,180	GR DV2
6011	47,207	QR DMV1
6012	181,193	NC1VR
6013	193,201	WNR D1CN
6014	23,184 205	WNR B1VVQ
6015	168	QNUYR&1UNQ
6016	46,196	WNR DN1&V1
6017	95,182	NC1R CO1 DO1
6018	30, 65 211	Q2N2QR DQ
6019	47,233	SH1VMR
6020	42,107	IR DMV1
6022	105	GYGUYR DG&R DG
6023	105	ER DR
6024	105	L6TJ AE BE CE DE EE FE
6025	80	L55 ATJ A A B COV1
6026	35	L B656 HHJ EMV1
6027	61,178	L B656 HVJ EZ
6028	58, 72	ZR CNUNO&R CZ
6029	23	L46 A EUTJ A A GQ G
6030	23	L46 A EUTJ A A GQ G
6031	181,210	L B656 HVJ EQ
6032	73	1UU1YOVMR
6033	74	1UU2OVMR C
6034	74	L6TJ AXOVMR
6035	175,200	L B656 HHJ ENU1R DNW
6036	145,167	T6N CNJ BQ D F &/WNR DM 2V
6037	53	L46 A EUTJ A A GZ G
6038	55	L46 A EUTJ A A E GN1&1
6039	55	L46 A EUTJ A A E GN1&1
6040	61,175	L B656 HHJ ENU1R DN1&1
6041	147,175	L B656 HHJ ENU1- CT66 BNJ
6042	55	L46 A EUTJ A A GN1&1 G

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6043	78,129 205	WN1YOVMR&XGGG
6044	78, 86 124	GR D CMVO2UU1
6045	140,173 200	T56 BVNVJ C1Y FNW
6046	51,139 165,205	T66 BVMMVJ GMVR DNW
6047	127,139 174,204	T56 BVNVJ C2E FNW
6048	140,173 200	T56 BVNVJ FNW C- 22
6049	28,140 171	T56 BVNVJ C2XQ2
6050	28,140 171	T56 BVNVJ C2YQ1U2
6051	139,173 200	T56 BVNVJ C4 FNW
6052	140,173 200	T56 BVNVJ C2R& FNW
6053	127,139 174,204	T56 BVNVJ C2E GNW
6054	140,173 200	T56 BVNVJ GNW C- 22
6055	140,173 200	T56 BVNVJ C6 GNW
6056	140,173 200	T56 BVNVJ C8 GNW
6057	127,139 174,204	T56 BVNVJ C1R EG& GNW
6058	127,140 174,204	T56 BVNVJ C1R DG& GNW
6059	201,210	L6TJ AR BQ CNW ENW
6060	26, 57	1N1&1 2YQ &GH &GH
6061	136,165	T6NJ DVMZ
6062	58, 93	10M1R DO1 &GH
6063	69,139 167	T C666 BN INJ E FZ LQ
6064	143,185	T5VNNV EHJ ER& BR &-NA-
6065	53	L6TJ AZ B- AL6TJ
6066	132	T3NTJ A2CN
6067	70,104 131,147	T C666 BNJ EG IMY&3N2&2 LO1 &ZSWQ
6068	71,104 223,227	WSO&Y&MR DSWMR DO1 BMY&SWO &/-NA- 2
6069	71,104 131,148 221	T66 BKJ B C1UNR DN1&1& EG HO1 &G

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6084	143,185 206	T5NNVYJ BR& DUNQ E
6085	38	2U2U1VM1Y
6086	60,151	T5NN DMJ CZ
6087	68,183 212	QR DN1&1U1V1
6088	26, 57	Q1YQ1NR&2U1
6089	25, 40	Q2VMY
6090	42,107	G1VM2U1
6091	35	L566 1A LT&&J HMV1
6092	74	1UU2OVMR
6093	177	L4V CVTJ B B D
6094	33, 70 103,130	G1U2N2QR CG FO1
6095	35	L55 ATJ C C D1MV1U1
6096	25, 40	Q1X&&VM1X1Q
6097	45,165	1U2MVVMN1&1
6098	25, 40	Q5MVR DVM5Q
6099	44,134	T6N CN ENJ AV1U1 CV1U1 EV1U1
6100	41, 91	2N2&VR DO1
6101	41, 91	1Y&NVR DO1&Y
6102	41, 91	1OR DVM1R
6103	41, 91	L6TJ AMVR DO1
6104	41, 91	1OR DVMR
6105	45,178	1VMR DVR
6106	44,109	ER DMV2
6107	38	2VMR DMV1
6108	46,178	2VMR DV1
6109	38	2VMR BR
6110	44,109	GR D CMV2
6111	47,197	WNR CNW DMV2
6112	35	1VN1&R
6113	38	2VN1&R
6114	38	2VMR DMV2
6115	46,178	2VMR DVR
6116	35	4NR&V1
6117	35	5NR&V1
6118	35	2XR DMV1
6119	35	1VM1U1MV1
6120	45,178	1VMR DV1
6121	40, 81	1VOR CMV1
6122	40, 57	1VMR DN1&1
6123	41, 91	1VMR BO1 EO1
6124	41, 91	2OR DO2 BMV1
6125	45,143	T6NJ BMV1
6126	45,141	T6NJ BMV1 F
6127	45,141	T6NJ BMV1 C
6128	45,141	T6NJ BMV1 D
6129	35	1Y&2NR&V1

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6130	45,178	1VMR CV1
6131	49, 98 121	1VMR CG FO1
6132	42,107	1VMR CG FMV1
6133	35	1VN1&1
6134	35	1VN1R&1R
6135	35	2Y2&MV1
6136	35	1VMR B DMV1
6137	38	5NR&V2
6138	38	2VNR&2Y
6139	38	2X&&NR&V2
6140	37	5NR&V3
6141	36	3VN2&2
6142	36	3VM3
6143	36	1Y&NV3&Y
6144	36	3VM1Y
6145	36	3VMY2
6146	36	4N4&V3
6147	36	5MV3
6148	36	3VMY2&2
6149	36	5N5&V3
6150	36	3VN1R&1R
6151	36	3VN3&3
6152	36	3VM1R
6153	44,108	ER DMV3
6154	36	L6TJ AMV3
6155	42, 92	3VMR DO1
6156	42, 92	3VMR DO2
6157	42, 92	3VMR BO2
6158	36	L66J BMV3
6159	37	VHN2&2
6160	37	VHM3
6161	37	VHM4
6162	37	VHM1Y
6163	37	VHMY2
6164	37	VHN3&3
6165	37	1Y&NVHY
6166	37	VHN4&4
6167	37	VHMY2&2
6168	37	VHN5&5
6169	37	VHMY4
6170	37	VHM7
6171	37	VHM8
6172	37	VHN8&8
6173	37	VHN1R&1R
6174	37	VHM2
6175	37	VHN4&R
6176	37	VHN5&R
6177	37	VHNR&2Y

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6178	44,108	VHMR BG
6179	36	L66J CMV3
6180	44,108	VHMR CG
6181	44,108	VHMR DG
6182	44,108	VHMR BG EG
6183	42, 92	VHMR DO1
6184	42, 92	VHMR BO2
6185	41, 91	4MVR BO2
6186	47,197	WNR BMV3
6187	41, 92	3N3&VR BO2
6188	41, 92	4N4&VR BO2
6189	41, 91	2OR BVM1R
6190	41, 92	3MVR BO2
6191	41, 92	2OR BVM1Y
6192	41, 92	1Y&NVR BO2&Y
6193	41, 92	2Y&MVR BO2
6194	41, 92	2OR BVN1R&1R
6195	41, 92	2OR BVMY
6196	37	L6TJ A- 2NVH
6197	49, 98 122	GR BMVR BO1
6198	49, 98 122	GR CMVR BO2
6199	49, 98 122	GR DMVR BO2
6200	49, 98 121	ER BMVR BO2
6201	49, 98 121	ER DMVR BO2
6202	49, 98 122	GR DR BMVR BO2
6203	41, 92	L6TJ AMVR BO2
6204	42, 92	2OR BVN1&R
6205	42, 92	2OR BVN4&R
6206	42, 92	2OR BVN2&R
6207	41, 92	L6TJ A- 2NVR BO2
6208	83,162	T56 BO DO CHJ GYX&&&OVX
6209	38	2N2&VX
6210	41, 92	2OR DVN1&1
6211	41, 92	2OR DVM1
6212	41, 92	3MVR DO2
6213	41, 92	2OR DVN2&2
6214	41, 92	3N3&VR DO2
6215	41, 91	4MVR DO2
6216	41, 92	4N4&VR DO2
6217	41, 92	2OR DVM1Y
6218	41, 92	2YMVR DO2
6219	41, 92	L6TJ AMVR DO2
6220	41, 91	2OR DVM1R

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6221	41, 92	5MVR DO2
6222	41, 92	5N5&VR DO2
6223	63,208	QR DM1R
6224	35	ZV1U1
6225	66, 99 136	T66 BNJ E HO1 JM2N2&2 &GH &GH
6226	66, 79 136	T66 BNJ E HO1 JMY3M3 &GH &GH
6227	58, 93	1OR BZ DO1
6228	168,180	1VO2OVMR
6229	35	1XMV1U1
6230	66, 99 133	T6NJ BX&R&O2N1&1 &QV3VQ
6232	137	T57 ANNNN&TJ
6233	69,154 233	T56 BN DSJ CSH GZ
6234	174	RNU1R
6235	59,141	T6NJ BZ C
6236	59,141	T6NJ BZ F
6237	59,141	T6NJ BZ D
6238	59,136	T66 CNJ JM3N2&2
6239	63,226	ZR DSWR DZ
6240	153,223	T5NOJ CMSWR DZ& D E
6241	231,243	SUYO2&S 2-ZN-
6242	231	1Y&OYUS&S 2-PB-
6243	231,243	1Y&OYUS&S 2-ZN-
6244	201,210	WNR BQ F ENW CY
6245	236	L66J CM 2YUS
6246	145,236	T6M CN DHJ BSH D D F
6247	145,236	T6N CN DHJ BSH D D F A- 2 DR
6248	31,120 211	Q1R BQ EG
6249	168	1YUNOVMR C
6250	168	2YUNOVMR
6251	58, 75	1N1&1YOVMR
6252	168	L6YTJ AUNOVMR
6253	50, 99 212	QR BVMR DO2
6254	37	R1VMV1R
6255	118,174	GR CG D1UNR
6256	112,148	T6NJ B1U1R BG DG
6257	76,110	F2OVMR
6258	76,109	ZVO2F
6259	76,110	GR CMVOY2
6261	76,110	GR CMVO2F
6262	22,128 195	QVYCN&U1R DG
6263	78,124 195	NC2OVMR CG

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6264	76,110	GR CMVOX
6265	76,110	L5UTJ COVMR CG
6266	115,199	L6TJ ANW ER& DE EE
6267	115,199	WNY2&YR DG&R CG DG
6268	112,168	GR DMVONUY
6269	62,191	NCYR&1M2 &GH
6270	133	T B6 H666 CN FNJ
6271	67,123	T56 BVNVJ C2N1&1-/G 4
	141,174	
6272	134,169	T66 BVNV EHJ CR
6274	140,173	T56 BVMVJ FNW
	200	
6275	166	L C6566 1A PJ
6276	166	L666 B6 2AB PJ
6277	207	QR X9Y
6278	83,161	T3OTJ B7VO1 C1- BT3OTJ D4
6279	19,161	T3OTJ B7VQ C1- BT3OTJ D4
6280	66, 99	T66 BNJ HO1 JM3Z &GH &GH
	147	
6281	38,142	T6NTJ AVR
6282	66, 99	T66 BNJ HO1 JM5MY3
	147	
6283	66, 99	T66 BNJ HO1 JM6N2U1&2U1
	147	
6284	143,180	T6NTJ AYR&1VR
6285	66, 99	T66 BNJ D E JM5MY &EH &EH
	147	
6286	27,145	T6N CN AUTJ B17 C2Q
6287	154	T6M CS ESTJ B D F &GH
6288	55	R2N1&2R &GH
6289	59,136	T66 CNJ BM3N6&6
6290	59,109	GR DMY&2MY &EH
6291	69,143	T6NJ BSWR DZ& DZ
	226	
6292	222,227	ZSWR DMYSWO&1YR&SWO &/-NA- 2
6293	32,102	Q3R DQ CO1
	213	
6294	82, 93	1OV1U1R CO1 DO1
6295	86,211	3OVR BQ EQ XX
6296	87,100	1OVYEU1R CO1 DO1
	124	
6297	87,100	1OVYEYER CO1 DO1
	125	
6298	33, 90	1OVYEYQR CO1 DO1
	103,130	
6299	87,100	1OVYEYO1&R CO1 DO1
	125	
6301	85,198	WNR C1U1VO2

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6302	32, 89 142,220	T6KTJ A2 A COVXQR&R &E
6303	32,151 182	T6N DOTJ A1VYQYQYQ1Q
6304	83,142	T6NTJ A2 COVYR&R &GH
6305	142,167	T6NTJ A2 CQ
6306	168,180	1VYUNOVMR
6307	168	2Y2&UNOVMR
6308	68,183 212	QR BQ DV1M3R &GH
6309	34, 70 104,214	QR BQ DYQ1MY1R DO1 &GH
6310	83,142	T6NTJ A COVYR&R &GH
6311	83,142	T6NTJ A2 CO2YR&R &GH
6312	60,147	T66 BNJ C H JM6N2&2
6313	139,154	T C666 BN ISJ B- CT6NTJ A2 &GH
6314	59,142	T6NTJ A CMYR&R &GH
6315	23, 51 225	QVR BVMR DSWMV1 &QH &QH
6316	33, 70 130,133	T66 BNJ EMY&2N2&2Q IG &.H2-S-O4
6317	129,144 184,220	L B666J DG MV1- AT6KJ &E
6318	31,120 148	T66 BNJ CR DG& JG EYQ- BT6NJ
6319	34, 70 131,148	T66 BNJ CR DG& EYQ1N2&2 IG &GH
6320	34, 70 104,131 148	T66 BNJ CR DG& HO1
6321	76,110	GR DMVO2UU1
6322	112,168	GR BMVONUY
6323	78,100 124	1Y&O1Y1GOVMR
6324	140,173 200	T56 BVNVJ C12 GNW
6325	146,170	T C565 DVNV JVNVJ E K
6326	146,170	T C565 DVNV JVNVJ ER& KR
6327	146,170	T C565 DVNV JVNVJ ER C& KR C
6328	146,170	T C565 DVNV KVNVJ ER B& KR B
6329	146,170	T C565 DVNV JVNVJ ER D& KR D
6330	146,170	T C565 DVNV JVNVJ E2 K2
6331	146,170	T C565 DVNV JVNVJ E3 K3
6332	146,170	T C565 DVNV KVNVJ EY KY
6333	145,170	T C565 DVNV KVNVJ E2U1 K2U1
6334	146,170	T C565 DVNV KVNVJ E4 K4
6335	146,170	T C565 DVNV JVNVJ E1Y K1Y
6336	146,170	T C565 DVNV JVNVJ EY2 KY2
6337	146,170	T C565 DVNV JVNVJ EX KX

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6338	146,170	T C565 DVNV JVNVJ EY3 KY3
6339	146,170	T C565 DVNV JVNVJ E5 K5
6340	146,170	T C565 DVNV JVNVJ E6 K6
6341	146,170	T C565 DVNV JVNVJ E7 K7
6342	146,170	T C565 DVNV JVNVJ E8 K8
6343	146,170	T C565 DVNV JVNVJ E1R& K1R
6344	113,145 172	T C565 DVNV JVNVJ ER BG& KR BG
6345	113,145 172	T C565 DVNV JVNVJ ER CG& KR CG
6346	113,145 172	T C565 DVNV JVNVJ ER DG& KR DG
6347	146,173	T C565 DVNV JVNVJ E- BT6NJ& K- BT6NJ
6348	145,173	T C565 DVNV JVNVJ E- K-/- BT6NJ C 2
6349	145,173	T C565 DVNV JVNVJ E- K-/- BT6NJ F 2
6350	113,145 172	T C565 DVNV JVNVJ ER CG B& KR CG B
6351	146,170	T C565 DVNV JVNVJ EY5&2 KY5&2
6352	17	QVR BVQ DVQ EVQ &ZY4&2 4
6353	18, 39 80	1Y&MVR BVO 2-CU-
6354	95,145 171	T C565 DVNV JVNVJ ER BO1& KR BO1
6355	95,145 171	T C565 DVNV JVNVJ ER CO1& KR CO1
6356	95,145 171	T C565 DVNV JVNVJ ER BO2& KR BO2
6357	95,145 171	T C565 DVNV JVNVJ ER CO2& KR CO2
6358	95,145 171	T C565 DVNV JVNVJ ER DO2& KR DO2
6359	95,145 171	T C565 DVNV JVNVJ ER DO2& KR DO2
6360	18, 91	QV1U1R CO1 DO1
6361	23	L6TJ AQ A1 2UU
6362	156	T3OTJ B1R
6363	156,180	T5OJ BR CV1U1
6364	23	QXR&1UU1
6365	23	L6TJ AQ A1UU1 DX
6366	26, 57	L B666 EY FUTJ A EUY KVQ K &Q1YM1Q
6367	20,207	QVR XQ XQ XQ
6368	34,162 167,184	T6O DVJ BVR& CQ F1Q
6369	20,207	QVR BQ CQ EQ XVQ
6370	38	2N2&VR D
6372	240	F-SN-F4&4
6376	240	O-SN-4&4
6377	216	1S 3PS
6378	81	1U2OV 2 DR

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6379	61,147 185	T66 BVN ENJ C2N2&2 &EH &EH
6380	62,197	L B656 HYJ ENW HU1R DN1&1
6381	27,140	T6NTJ A1YQR B EY &GH
6382	56	2N2&1R B D F C1N2&2
6383	62,191	NCYR&1MY &GH
6384	101,154 203	T56 BN DSJ CO4 GNW
6385	128,215	T6N CNJ EG BM 2PO&R
6386	154,223	T5N CSJ BMSWR DNU1 &-NA-
6387	66, 99 147	T66 BNJ HO1 JM6- AT6N DNTJ D1R &QVVQ
6388	18, 81	QV1Y12&VO4
6389	18, 80 81	4OVR BVO 2-CU-
6390	231,243	L6TJ AOYUS&S 2-ZN-
6391	80,162 187,228	T56 BVO DHJ XSWO 2-CU-
6392	116,209	QR DG B F
6393	211,227	WSO&R XQ XY XX &-NA-
6394	227	L66J XYXY XSWO &-NA-
6395	116,209	QR BG DG C E F- 21
6396	29,134 241	T5MVNTJ A2Q
6397	64,134 241	T5N CO AUTJ B11 D1Y&1X
6398	134,241	T5NVNTJ A2Y&1X C2Y&1X
6399	153	T5MVNTJ C2Z
6400	201,210	WNR B F DQ
6401	47,218	6Y&R X1K&&1VM 22 &G &G
6402	236	SUYZMR BR
6403	151,239	T6NJ BM 2YUS
6404	145,236	T6N CN DHJ AR& BSH D D F
6405	134	T5N CNTJ A2Y&1X B1Y&1X C1Y&1X
6406	151	T6N CN ENTJ A- C- E-/2Y&1X 3
6407	145,236	T6N CN DHJ AR BR&& BSH D D F
6408	62,192	NC2M18
6409	222	1X&&1X&&M 2SW
6410	33,184 240	Q2MYUS&MX1V1
6411	184,240	WNR DMYUS&MX1V1
6412	149,228 239	T6N CN DHJ AR D BSWQ& BSH D D F
6413	137,227 239	L66J CSWQ G- AT6N CN DHJ BSH D D F
6414	137,227 239	L66J BSWQ GSWQ E- AT6N CN DHJ BSH D D F
6415	36	1MVR
6416	36	2MVR

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6417	36	3MVR
6418	36	1YMVR
6419	36	1U2MVR
6420	36	4MVR
6421	36	1Y1MVR
6422	36	2YMVR
6423	36	1XMVR
6424	140,172	T56 BVNVJ C- BT6NJ C
6425	36	1R BMVR
6426	36	1R CMVR
6427	36	1R DMVR
6428	43,108	GR BMVR
6429	43,108	GR CMVR
6430	43,108	GR DMVR
6431	43,108	GR DG BMVR
6432	36	5MVR
6433	140,179	T56 BVNVJ C- BT6NJ F
6434	46,197	WNR BMVR
6435	46,197	WNR CMVR
6436	46,197	WNR DMVR
6437	46,197	WNR CNW DMVR
6438	16	L B666 FUTJ A E F1U1 KVQ K
6439	84,179	L4TJ AV1 B B C1VO12
6440	94,161	T D3 C555 A EOTJ JO2 2O
6441	30, 98 120	Q1YQ1OR DG
6442	142	L B666 FUTJ A E1U1 E KVQ K &T6NJ
6443	85,192	NCXCN&OV1
6444	25, 39	QY&1MVY4&2
6445	25, 57	2Y2&YQ3N1&1
6446	61,179	4Y2&YV1&N1&1
6447	26, 57	1X&&1Y&1YQ3N1&1
6448	241	1X&&1X&&M 2V
6449	19,136 171	T5 I6 F666/FO/FS 3AEF S BVNV FX RUTJ CR& JVQ J N RY
6450	139,216	T3NTJ A- 3PS
6451	133,230 239	T5NYNJ A2MYS&US BUS &-NA-
6452	54	3MY3&1UU1
6453	55	1N1&Y3&1UU2N1&1
6454	56	1X&&1X&&M2UU2N1&1
6455	54	1X&&1X&&M2 2UU
6456	150	T6N CN ENTJ AR& CR& ER
6457	56	1X&&1Y&1YN1&1&1 2UU
6458	55	1X&&1Y&1YN1&1& 22
6459	150	T6N CN ENTJ A12 C12 E12
6460	155	T5NSWNTJ A2Y&1X C2Y&1X
6461	53	QV1SYUS&O4 &L6TJ AZ
6462	145,236	L66J B- AT6N CN DHJ BSH D D F

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6463	145,236	T6N CN DHJ AR B& BSH D D F
6464	145,236	T6N CN DHJ BSH D D F A- 2CR
6465	145,236	T6N CN DHJ BSH D D F AR D- 2
6466	231,243	2Y&OYUS&S 2-ZN-
6467	145,236	T6N CN DHJ AR& BSH D D F
6468	236	SUYZMR D- 2
6469	26, 57	L B666&&TJ HYQ1N2Y&&2Y &GH
6470	51,205 214	L6TJ AR BQ ENW CVM4
6471	116,209	QR BQ DG
6472	71, 90 131,214	QR DE BR& FVO2NY&&Y &GH
6473	155,188 234	T5NS DNJ CS-HG-2 RS-HG-2
6474	72	T6OBOTJ E E BO1 2X
6475	25, 56	L566 1A LT&&J HYQ1N3&3
6476	68,153 182	T6N DOTJ AYR&YVR&N1&1R
6477	68, 89 156,186	T66 BOVJ DVO2N1R&1R &GH
6478	61,139 171	T56 BVNVJ C1R CZ F
6479	149,223	T6NNJ CMSWR DZ& F
6480	59,132	T5M CN BUTJ B1NR&1R &WSQ1
6481	153,183 204	T6N DOTJ A- 2/YVR&YR CNW&/
6482	153,183	T6N DOTJ A2V- CT5OJ BR& FR
6483	153,183	T6N DOTJ A2V1U1- BT5OJ
6484	50,122 212	QR DE BR& FVN1&1
6485	158	T7O CO EUTJ BY2
6486	80	2U1VOY
6487	71, 90 131,214	T7O CO EUTJ B1U2
6487	158	QR DI BR& FVO2NY&&Y &GH
6488	158	T7O CO EUTJ BY
6490	47,208	QR BR& FVM4
6491	26, 81	2U1OV1 2XQVO1U2
6492	81	2U1OVYU1&1VO1U2
6493	18, 81	QVYU1&2VO2U1
6500	50,122 212	QR DG BVM1
6501	50,122 212	QR DG BVM1U2
6502	50,122 212	QR DG BVMY
6503	50,122 212	QR BVM1Y
6504	45,141	T6NJ BMVR& F

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6505	50,122 212	QR DG BVM2
6506	50,122 212	QR DG BVM4
6507	45,141	T6NJ BMVR& C
6508	50,122 212	QR DG BVMY2
6509	50,122 212	QR DG BVM3
6510	155,234	T6N CS DHJ BQ D D F &-NA-
6511	155,234 243	T6N CS DHJ D D BS 2-ZN-
6512	141	T6N DNTJ A1R& D1R &GH &GH
6513	59,109	L6TJ AN1R&1R DE
6521	87,125 159	T5CJ BVO2G
6534	50,122 212	ZVR BQ EG
6535	50,122 212	QR DG BVMX
6536	29, 64 98	L B666&&TJ HYQ1N4&R DO1 &GH
6537	26, 57	L B666J DYQ1N3Y&&3Y EY K &GH
6538	29, 64 97	L66J BYQ1N4&4 CO1 &GH
6539	25, 57	L66J BYQ2N5&5 &GH
6540	34, 71 104,148	T66 BNJ EYQ3N4&4 HO1 &GH
6541	61,179	L B666J DVY&N5&5 F LY
6542	152,219	T6K DOTJ A16 A1- BT3OTJ &G
6543	44,131	T5N CN AUTJ B17 C2MV1
6544	21,152 219	T6K DOTJ A2VQ A18 &OVN1&1
6545	28,218	Q2K&16&1YQYQYQYQ1Q &E
6546	32,152 183,219	T6K DOTJ A1R& A1/Y&V1- 7YQ &G
6547	58	2NR&1N2&R
6548	146,221	T5KTJ A12 A2 B E &WSO&O2
6549	147,221	T5KJ A16 A &WSO&O1
6550	155,221	T6K DSJ A16 A &WSO&O1
6551	155,221	T6K DSJ A16 A &WSO&O1
6552	218	12R DK2&2&2 & 2WSO&O
6553	146,221	T5KJ A18 A2 B E &WSO&O2
6554	142,220	T6K DKJ A12 A2 D12 D2 &WSO&O2 2
6555	70,103 129,131	T C666 BNJ EG IM1YR&2N2&2 &GH &GH
6556	67,123 182	1MR DE B1VR

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6557	33, 70 103,130	2OR BG DYQYZ2R &GH
6558	33, 70 103,130	2OR BG DYQYZ3R
6559	29, 64 119	GR BYQ1N8&8
6560	70,103 130,132	T C666 BNJ FO1 IM1YR&2N1&1 &GH &GH
6561	152	T6N DOTJ AOPO&O4&O4
6562	152	T6N DOTJ A16
6563	217	12K1R &WSO&1
6564	217	12K1R &WSO&12
6565	152,219	T6K DOTJ A16 A &WSO&R D
6566	96,218	8R DO2O2K2 &WSO&12
6567	152,219	T6K DOTJ A16 A2 &WSO&1
6568	152,219	T6K DOTJ A16 A2 &WSO&12
6569	139,216	T3NTJ A- 3PO
6620	32,128 183	GR DYQVR DG
6621	63, 71 208	ZR BQ E-AS-O
6622	29, 64 97	L66J BYQX&&1N4&4 EO1 &GH
6623	52, 68 89	ZVR DVO2
6624	25, 56	STRUCTURE UNKNOWN
6625	63,208	ONX&&R BQ DX&&1X
6626	144,167	T66 AN EM FHT&J DQ
6627	94,148	T66 BNT&J HO1 B9- AT6NTJ
6628	94,148	T66 BNT&J HO1 B10- AT6NTJ
6629	26, 57	L B666J DYQ2N4&4 EY K
6630	26, 57	L B666J DYQ2N6&6 EY K
6631	132,242	T6VMVNV FHJ DR& F2
6632	104,134	T56 BM DN&IJ CNUYZZ
6633	66,123 147	T66 BN BUTJ EY&2YZN2&2 IE &QPQQO
6634	142,220	T6K DKJ A16 A2 D16 D2 &WSO&O2 2
6635	52,226	WS1R DYZUM &GH
6636	67,124 226	ZR DSWR DZ CG
6637	63,226	ZR DSWR DM3
6638	52, 70 137,226	T6NJ CVMR DSWR DZ
6639	23, 52 148,226	T5NJ AR DSWR DMV2VQ&& B E
6640	30, 65 120	L66J BXQG1N6&G &GH
6641	67,123 182	GR DV2YZ1R &GH

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6642	69,103 129,184	2OR BG DV1N1&1R &GH
6643	143,222	T6N DNJ B- C-/MSWR DMV1 2 E F
6644	70,103 130,131	T C666 BNJ EG LO1 IMY1R&2N2&2 &GH &GH &QH 3
6645	134,223 242	T5MVMV EHJ E1SR& ER
6646	69,103 130,132	T C666 BNJ EG LO1 IY2YZN2&2&- DT6NJ &GH 3 &QH
6647	223	1SYS1& 2
6648	51,102 183	1VMR BV1 XO1
6649	30, 65 211	Q2M1R BQ CR
6650	25, 57	L66J BYQ2N3&3 &GH
6651	94,147	T66 BNJ C2R DO1
6652	94,147	T66 BNJ E2R DO1
6653	94,147	T66 BNJ E2R DO1& HO1
6654	30, 65 211	Q2M1R BQ EX2
6655	30, 65 211	Q2N2Q1R BQ EX
6656	63,208	L6TJ AR CQ EX B1N1&1
6657	63,208	2N2&1R BQ C EX&&2Y
6658	29, 64 98	L66J BYQ1N5&5 CO1 &GH
6659	63,208	5Y&R CQ EY5 B1N1&1
6660	63,208	5Y&R CQ D1N1&1
6661	63,208	12R XQ X1N1&1
6662	30, 65 211	Q2M1R BQ EX
6663	25, 57	L66J BYQ3N7&7
6664	63,208	6Y&R DQ C E1N1&1
6665	60,147	T6NJ EYN2&2&2YZ HN1&1
6666	144	L66J B2- BT6NJ &GH
6667	34, 70 131,143	T66 BNJ EM1YQ1N2&2 IG
6668	129,149 223	T6N CNJ BMSWR DZ& EE
6669	30, 65 120	L66J BYQ2N2&2 EG &GH &QH
6670	30, 65 120	L66J BYQ1N5&5 CG &GH
6671	31,120 152	T6N DOTJ A1YQR DG& B2 &GH
6672	30, 64 119	Q2M1R DE &GH
6673	69,128 213	1X&&R CQ EE D1N1&1

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6674	33, 70 130,214	Q2M1R BQ CE EX
6675	33, 70 130,214	Q2M1R BQ CG EX
6676	30, 65 120	L66J BYQ1M12 EE
6677	67,123 182	2N2&R D1R XG D1M1VR
6687	35	AMV1
6688	38	AMVY
6689	44,109	G2VM1
6690	48,225	ZSWR DMV5
6691	73,151	T56 BMVOJ
6692	45,141	T6N DNTJ AV1 D12
6693	45,141	T6N DNTJ AV11 DV11
6694	81	1OVYVO1&U1R
6695	39	RMVYVMR&U1R
6696	161,205 222	UNKNOWN STRUCTURE
6697	69,132 221	T6NJ BM- BL6V DVJ E- 2M
6698	104,132	T56 BN DNJ B1V1 CZ
6699	68, 89 213	ZX&&R BQ EVO1 CXZ
6700	20,145 185	T5MVTJ C5 DR& EVQ
6701	156,164 204	T5OJ BNW E1UNMVMVZ
6702	30, 65 211	Q2N2Q1R BQ CR& EX
6703	63,226	ZR DSWR DM12
6704	152,225	T6N DOTJ A- 2SW
6705	149,185	T5NNVJ A BR& DMSWN1&1 E
6706	222	1N1&SWMR BR
6707	142,225	T6NTJ ASWN1&1 B
6708	152,225	T6N DOTJ ASWN1&1
6709	154,223	T5N CS AUTJ BMSWR DZ& D D
6710	67,123 182	L B666J DV1N2&2 HE
6711	128,166 205	WNR CNW DMNUY7&R BG
6712	59,141	T6NJ BZ F &GH
6713	50,122 212	ZVR BQ EG
6714	50,122 212	QR DG BVMX
6715	50,122 212	QR DG BVM5

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6718	50,122 212	QR DG BVM8
6719	34, 52 131,214	Q2MVR BQ EG
6720	50,122 212	QR DG BVM1R
6721	34, 52 131,214	Q3MVR BQ EG
6722	50,123 212	QR DG BVMR
6723	50,123 212	QR DG BVMR BG
6724	50,123 212	QR DG BVMR CG
6725	50,123 212	QR DG BVMR DG
6726	50,123 212	QR DG BVMR BG EG
6727	52,131 206,214	WNR BMVR BQ EG
6728	52,131 206,214	WNR CMVR BQ EG
6729	52,131 206,214	WNR DMVR BQ EG
6730	51,123 212	QR DG BVMR B
6731	51,123 212	QR DG BVMR C
6732	51,123 212	QR DG BVMR D
6734	137,169	T5VNVJ BY
6735	137,169	T5VNVJ BR
6736	137,169	T5VNVJ B- 2 CR
6737	84,137 171	T5VNVJ B2VO1
6738	28,137 171	T5VNVJ B1Q
6739	176	OCNY
6740	45,136 171	T5VNVJ BVZ
6741	45,136 171	T5VNVJ BVMX
6742	86,241	ZVMV1U1VO1 &ZV1U1VQ
6743	89,128 242	ZVMV1U1VO2G
6744	89,205 242	ZVMV1U1VO1Y2&NW
6745	89,102 242	ZVMV1U1VO2OR D8

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6746	86,241	ZVMV1U1VO12
6747	86,241	ZVMV1U1VO1
6748	86,241	1XMVMV1U1VO1
6749	86,241	1Y&OV1U1VMVMX
6750	17, 39	QV1U1VMY
6751	17, 39	QV1U1VMR
6752	21,241	ZVMV1U1VQ
6753	88,228 243	WSO&MVMV2VO1 &-NA-
6754	88,228 243	ZVMV2VO12SWO &-NA-
6755	88,228 243	WSO&1OV2VMVMX &-NA-
6756	88,228 243	1Y&OV1YSWO&VMVMX &-NA-
6757	88,228 242	WSO&12OV2VMVMX &-NA-
6758	32, 89 242	ZVMV1U1VO2Q
6759	137,173 233	T5VNVJ B1SCN
6760	22, 35 51	VHMV1U1VQ
6762	52,148 174,232	T5VNVTJ BVZ DSV1
6763	133,173 230	T5VNVJ B1MVS4
6764	136,173 175	T5VNVJ BNU1R
6765	46,191	ZV1U1CN
6767	153,206	T6NOTJ ANO X
6768	153	T6NO DUTJ AR
6769	55	1N1&R B- 2
6771	15, 90 162	T5VOVTJ D1R DO1
6772	20,207	QV1YVQ1R DQ
6775	174,209	L66J BY CQ DQ E1UN6 GQ I H- 2
6776	80,126 148,167	T66 BNJ GG IG JO 2-CU-
6779	81	4OV2VO4
6780	50,123 212	QR CE FVMR CE
6782	25, 40	QY5&11VM2Q
6783	25, 39	Q2MV5YQ2U9
6784	25, 40	QY5&11VM 22
6785	34	VH6 &.H2-S-O3
6786	25, 39	QY6&10VM 22
6787	15,151	T66 BMVOVJ
6788	143	T6N DNJ B C E F

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6789	141	T6M DMTJ B F
6790	142,206	T6N DNTJ ANO B DNO E
6791	59,141	T6M DNTJ D2Z
6792	141	T6M DMTJ B2 E2
6793	142	T6M DNTJ D2
6794	142	T6M DNTJ DR
6795	142	T6M DMTJ B C E F
6796	146	T5MTJ B E
6797	15,162 167,185	T5VOVTJ DV1 EV1
6799	79,157	T5OVOJ D
6801	27,134	T5N CNJ A2Q
6802	26, 75	QY1OVM2Q
6803	53	L6TJ AZ D9
6805	79,111 157	T5OVOJ D1G
6806	53	L6TJ AZ BZ
6807	79,111 157	T5OVOJ DG
6808	26, 75	Q2OVM12
6809	74,153	T5MVOTJ D
6810	74,153	T5MVOTJ DR
6811	26, 75	ZVO2Q
6812	27,153	T5N COTJ A2Q B9
6813	244	Z2N2ZYUS&SH
6814	26, 75	Q2OVM1R
6815	114,156 186	T B666 HOVJ DG
6816	18, 91	QVR BR BO1
6817	157	T B666 HO IHJ I I
6818	28,107	QXR BR BQ
6819	156,186 201	T B666 HOVJ DNW
6820	83,159	T5OJ BVO16
6821	83,160	T5OJ BVO18
6822	83,159	T5OJ BVO22
6823	87,125 160	T5OTJ BVO12 BG CG DG EG
6824	87,125 160	T5OTJ BVO16 BG CG DG EG
6825	87,125 160	T5OTJ BVO18 BG CG DG EG
6826	87,125 160	T5OTJ BVO22 BG CG DG EG
6827	87,125 160	T5OTJ BVO2G BG CG DG EG
6828	88,160 203	T5OJ BVO1 ENW

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6830	19,157	T5OJ B2U1VQ
6831	59,159	T5OJ B1Z
6832	59,159	T5OTJ B1Z
6834	155,180	T5OJ B1U1V1
6835	44,158	T5OTJ BVZ
6836	117,228	GYGUYGSWO1XGGG
6837	227	WSO&4 &-NA-
6954	240	L6TJ A- 4-SN-
6961	71	R-SB-R&R
6962	71	G-SB-GR&R&R
6963	240	R 4-SN-
6969	224,240	S-SN-4&4
6970	224,240	12-SN-4&4&12
6971	229,240	4N4&YUS&S 2-SN-4&4
6972	214,240	T4OPO-SN-J BO5Y BO D4 D4
6973	141	T6M DMTJ &QH 6
6974	149,223	T6NJ BMSWR DZ
6975	153,240	T6N DOTJ A4 2-SN-GG
6977	176	L6V BUTJ B EYU1
6978	81	2OV8VO2
6979	61,139	T66 BVMMVJ GZ
	166	
6980	175	.NA2.MO-O4
6981	175	.MO-O3
6982	15,162	T5VOVTJ X12
6983	176	OCNR B CNCO &OCNR B ENCO
6985	176	OCNR B ENCO
6986	176	OCNR B D- 2
6987	176	OCNR D1R DNCO
6989	72	1Y&O 3B
6990	72	1O 3B
6991	175	.LI..Q.QH
6992	175	.B2..O3
6993	175	.NA2.B4-O7.QH10
6994	62,197	WNR BNR&R
6995	151,166	T6MMVMMVJ &T5MMVNVJ DZ
6996	115,198	WNR BG DG ENW
6997	177	L6V CVTJ E E
6998	28,135	T5K CN BUTJ A2Q A1R& BA &G
	219	
7006	27,135	T5N CN AUTJ B8U9 C2Q
7008	245	UNKNOWN STRUCTURE
7009	84,136	T5VNVJ B1OV1 D
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7023	177	L6VTJ
7024	177	L6VTJ D
7025	168	QNUYR&2R

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7075	193,210	QR D1UYCN&CN
7076	95,192	NCYCN&U1R CO2 DO2
7077	193,201	WNR X1CN
7078	62,191	ZR BCN &GH
7079	37	RMV1U1R
7080	229	SUYR&MR
7081	104	MUYMR&NR&R
7082	104	1R BMYUM&MR B
7087	113,149 172	T5VNVTJ BR& DG ER XG
7088	163	T67 GO JS&TJ C
7089	118,238	MUYZS1R-/G 4 &GH
7090	102,128 230	GR CG DO2SYUS&N1&1
7091	96,230	1N1&YUS&S2OR D
7092	116,209	QR BG FG D- 2X
7093	206	QR B9 D F- 21
7094	21, 48 119	QVR BVMR CG DG
7095	118,239	SUYM1&MR DG
7096	115,192	NCYR&1U1R BG
7097	191	NC2XCN&CN&2CN
7098	114,179	GYGVR DG
7099	45,149 171	T5VNVTJ BVZ
7100	31,120 211	Q1R BQ EG C- 21
7101	94,164	1Y&UNMSWR D- 2O
7102	136,173 242	T6NVNVNVJ AR& CR& ER
7103	163,230	T5SJ BSYUS&N1&1
7104	129,163 224	T5SJ BS1R DG
7105	128,183 223	L6VTJ BSR DG
7106	71,151 166,234	T5MN DNJ CMZ DZ ESH
7108	111,163	T68 GO KS&TJ CG IG
7109	48,206	ONNV7& 22
7110	51,129 242	ZVMMVR DG
7112	24	L56 BXT&J D D B-& 2
7113	222	ZVMMV1 2U
7114	59,143	T6NJ B E2MR
7115	154,233	T56 BN DSJ CSCN
7116	117,224	G2SR
7117	117,223	GR DS1SR DG
7120	132,180	T56 BM DNJ C2VR
7121	155,239	STRUCTURE UNKNOWN

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7026	167	QNUY1R&1R
7027	168	QNUY2R&2R
7028	156,180	T5OJ B1U1VR
7029	162,167 187	T66 BOVJ E IQ
7030	167	QNUY2R
7032	158,168	T5OJ B1UNQ
7033	164,199	ZMVR CNW
7034	181,201	WNR C1U1VR
7035	155,180	T5OJ B1U1V1
7036	79	RMMVMMR
7037	234	ZMYUS&MR
7038	19,143	T B656 HMJ DX LX
7039	165	4UNMR
7040	144,185	T6NVJ A
7041	42,107	E1VMY2
7042	216	1N1& 3PS
7043	193,201	WNR DCN
7044	168,211	QNU1R BQ
7045	29,168	QNUYR&YQR
7046	168,180	QNUYR&VR
7047	35, 51 128	VHXGGYG &ZV2
7048	38	ZV1Y
7049	42,107	G1VMR
7050	36	ZVY2&2
7051	42,107	GYGVMR
7052	47,208	ZVR BQ
7053	42,107	GXGGVMR
7054	225	WSR&MR
7055	69,224 225	ZSWR DZ CS 2
7056	37	11VMR
7057	36	RVMR
7059	47,207	QR B1UNV1
7060	228	SUYMR
7061	225	ZSWR D
7063	42,107	ER BMV1
7064	42,107	GR DMV1
7065	38	2VMR
7066	154,166	T56 BN DSJ CMZ
7067	64,221	T C666 BV IVJ DZ
7068	38	5VMR
7069	154,223	T5N CSJ BMSWR DZ
7072	117,163 226	T56 BSWTJ CE DE
7073	117,163 226	T56 BSWJ CE
7074	176	L B666&TTJ A EY KNCO K

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7129	157,167	T66 BOVJ EQ D- 2S
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7133	181,201	WNR DVR DNW
7135	83,144	T6NJ C1VO2
7138	135,219	T5K CNJ A1R& C E11 &E
7139	241	RXR&R&MVM1R
7140	41, 92	ZVR BO2
7142	31,120	WN1YQXGGG
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7143	31,120	GXGGYQ1MVR
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7144	29, 48	GXGGYQ1MVR
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7145	196	WN1U1R CNW
7146	115,208	QR-/G 4 BQ
7147	96,198	WN1U1R CO1 DO1
7148	101,204	WN1U1R DQ CO1
	213	
7149	96,198	WNY&U1R CO1 DO1
7151	127,158	T5OJ BG E1U1NW
	204	
7152	115,199	WN1U1R BG DNW
7153	115,199	WN1U1R BG DG
7154	163,199	T5SJ B1U1NW
7158	58, 93	R2N1&1R DO 23 &GH &GH
7159	157,185	T66 BOVJ E
7160	58, 93	6N1&1R DO 22
7161	141,165	T6NJ BVMZ
7164	27,106	QX2&2&1UU1G
7166	147,241	T66 BMVNVJ D4
7167	22,119	T5OJ BVQ CG DG
	160	
7168	87,125	T5OJ BVO2 CG DG
	160	
7171	112,133	T6NJ B1U1R DG
7172	112,144	T6NJ D1U1R DG
7173	37	3VMR
7174	39	RMV1VMR
7175	174	R1UNYR&NU1R
7176	174	RNU1R
7177	176	RVR
7178	42,107	E1VMR
7179	44,109	ER BMV2
7180	47,208	L6TJ AMVR BQ
7181	42,107	E1VMR B
7182	47,208	L66J BMVR BQ
7183	119,223	ZSWR DMV1E

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7185	161,193	T5OYTJ BUYCN&CN
7186	168	QNUYR& 2
7187	54	1U2MR
7188	226	WSR&R
7189	165	RMNU1R
7190	162,180	T C666 BO IVJ
7191	164	1VMMR
7192	222	ZVMMR
7193	158,222	T5OJ B1UNMVZ
7194	61,178	ZR DV1
7195	225	ZSWR D
7196	58, 93	1Y&M1R DO 26
7197	176	RVR
7198	132,184 227	T5NNV DHJ AR DSWQ& E
7199	168	QNUY&YUNQ
7200	28,178	L6VTJ BQ
7201	166	1UU1R
7202	34	VH2R
7203	177	4VR
7204	27, 91	Q1R DO1
7205	90	1OR D
7206	94,111	GR DO2
7207	90	1OR BO1
7208	96,198	WNR BOR
7209	34, 91	VHR BO1
7210	80	1VOR B
7211	224	2SR D
7213	51,147 232	T66 BNJ GMV1 JSV1
7214	29, 48 119	Q2MV1R DG
7215	64,237	MUYZS2N2&2 &GH &GH
7216	235	MUYZS2 &EH
7217	156,199	T5L BOJ DNW
7218	134,234	T5N CNJ A2 BSH
7219	133,205 224	T66 BNJ GNW JS 2
7220	242	ZVMV1R
7221	70,145 167,206	T6N CNJ BZ DZ ENO FQ
7222	142,193	T6NJ A2XR&R&CN
7224	23, 70 103,130	QVR DG FMR DO1
7226	103,130 132,184	T C666 BN IVJ EG LO1
7227	191	L5TJ A1CN
7253	117,227	WSR&OR BG DG

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7255	56, 73	1N1&1 & 3B
7256	54, 72	1M1 & 3B
7257	73,144	T6NJ X- 3B
7258	25, 57	Z2M2Q 3GH
7261	31,120	WNY&YQXGGG
	202	
7262	94,141	T6NTJ A1R C FO1& B &GH
7263	22, 51	QV1OR BVM2U1
	102	
7264	22,119	T6NJ CVQ EF
	138	
7265	19,137	T56 BMJ D1YVQVQ
7266	94,141	T6NTJ A1R CO1 DO1& B &GH
7267	151,209	T6NTJ A1R BQ E& B &GH
7268	137,209	T6NTJ A1R BQ C E& B &GH
7269	141,224	T6NTJ A1R C FS1& B
7270	58, 93	1OR D2 2M &.H3-P-O4
7272	89,205	WNR DQ CVO2
	214	
7273	83,136	T56 BMJ CVO2
7275	148	T6MVMVXVJ E-& AL5XTJ
7276	132	T56 BM DNJ C1R
7277	115,208	QR DQ-/G 4
7278	206	ONR DMR
7279	165	ZVMMVZ
7280	55	L6TJ AMR DMR
7282	165	ZVMVZ
7284	55	RMR DMR
7285	117,222	L6V DVJ-/G 4
7286	154,233	T56 BN DSJ CS 2-ZN-
	243	
7287	229,243	R1N1R&YUS&S 2-ZN-
7288	229,243	1N1&YUS&S 2-ZN-
7289	56	ZR DMR
7290	240	1N1&YUS&S 2
7291	31,120	Q1R BQ EG C- 21
	211	
7292	154,223	T56 BN DSJ CSM- AL6TJ
7293	164	ZMV1U1VMZ
7294	143,166	T6VMMVJ
7295	231	SUYO4&S 2
7296	240	4N4&YUS& 2S
7299	53	ZR DIR DZ
7301	216	2SPS&S2&O2

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20. ABSTRACT *(Continue on reverse side if necessary and identify by block number)*

Over 4,600 compounds, chiefly organic types, were evaluated using both a food acceptance test (Part A) and a barrier penetration bioassay (Part B), to correlate relationships between chemical structure and rodent repellency.

These chemicals are indexed and classified according to the functional groups present and to the degree of substitution within their molecular structures. The results of reduction in food consumption for each compound appraised are calculated and their K values listed in Table I.

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The repellent activities of the functional groups represented, alone or in combinations, are expressed in Table II by a Functional Group Repellency Index. A ranking of these indices suggests that acyclic and heteroyclic compounds containing tri- or pentavalent nitrogen would be a parent compound of choice for synthesizing novel repellents. Other molecular arrangements, spatial configurations and combinations of functional groups are compared.

There were 123 active, interesting or promising compounds included in the 699 having K values of 85 or greater, which were selected for the barrier appraisal study. These chemicals were formulated in selective solvents at several concentrations and applied to burlap. Small food bags were fashioned using the fabric impregnated with the candidate formulation, and exposed to rodent attack following storage periods of varying intervals. The results of these tests are listed in Table III. Again, those compounds containing nitrogen in the functional groupings indicated a high order of effectiveness. Several commercial patents covering rodent repellents were issued using the data from the food acceptance and barrier studies.

Organizations and cooperators which supplied samples for the program are listed in Appendix I. The Wiswesser cipher for compounds in Table I is used in Appendix II to facilitate location of chemicals by sample code number as they appear under the index headings, and for computer storage and analysis.