

**United States
Department of
Agriculture**

Animal and Plant Health
Inspection Service

Wildlife Services

National Wildlife
Research Center

Research Report
No. 04-01

Toxicity, Repellency or Phytotoxicity of 979 Chemicals to Birds, Mammals and Plants



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By: Edward W. Schafer, Jr.¹
Walter A. Bowles, Jr.¹

¹ Mr. Schafer and Mr. Bowles are retired, former employees of the USDA, APHIS, WS, NWRC, located in Fort Collins, Colorado.

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Abstract: This publication is a summary of the results of an intensive 5-year search of records at the National Wildlife Research Center (NWRC). This compilation will be useful to public, private, academic, and government personnel who are assessing, improving, or expanding available environmental risk assessment data sets and models from bioactivity studies conducted by the NWRC from 1959 through 1987. These data were the result of approximately 3,760 studies conducted with 76 species of birds, mammals and plants on 979 chemicals.

Acute and subacute toxicity and repellency data on 395 chemicals are included. Twenty-six species of wild and domestic birds were studied. These data include estimates of acute oral, dermal, inhalation, or intramuscular toxicity for 345 chemicals on 26 species of birds, a single measure of repellency for 284 chemicals on 9 species of birds, and a single measure of subacute oral toxicity for 44 chemicals on red-winged blackbirds (*Agelaius phoeniceus*). These data were collected from approximately 1,000 individual tests and some of the data supplement previously published NWRC information.

Repellency, acute and subacute toxicity data are also included for 653 chemicals on 34 species of wild and domestic mammals. These data include estimates of acute oral, dermal, interperitoneal, or intraocular toxicity for 345 chemicals on 27 species of mammals, 4 measures of repellency for 485 chemicals on 8 species of mammals, and a single measure of sub-acute oral toxicity for 447 chemicals on 7 species of mammals. These data were collected from over 2,000 individual tests and some of the data supplement previously published NWRC information.

Two bioassay measures of phytotoxicity (foliar and seed treatments) are included for 222 chemicals on 16 species of wild and domestic plants. One measure involved monitoring the percent germination and growth of seeds treated with the candidate chemical, and the second measure involved determining, by monitoring for signs of phytotoxicity, the effects of foliar treatments applied to young plants. These data were from approximately 750 individual tests and represent the first large-scale summarization of NWRC phytotoxicity data.

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INTRODUCTION

During the last 50 years the Denver Research Laboratory (DRL) has undergone a series of name and administrative changes. Throughout this time, the DRL became the Denver Research Center (DRC), the Denver Wildlife Research Center (DWRC) and ultimately, following a move to Fort Collins, Colorado, the National Wildlife Research Center (NWRC). Beginning in the late 1950s, the DRC began a 30-year project to test chemical compounds for their bioactivity in terms of their potential use as repellents, deterrents, markers, toxicants, emetics, antiemetics, immobilizing agents, tranquilizers, chemosterilants and reproductive inhibitors on a variety of wild and domestic plants, mammals, and birds. Data generated from this work were compiled into the "DRC Chemical Tracking System." Approximately 6,800 DRC numbers were assigned to over 6,100 known and unknown chemicals that were submitted to the DRC or its successors during the program.

The DRC number was used as the basic identification for all archived records and for data on most chemicals that were tested from 1959 to 1987. The chemicals tested were received from cooperating chemical, pesticide or drug companies, purchased from chemical/drug supply houses, or contributed by other government organizations or individuals for testing. DRC numbers were used to track the status of each chemical and to identify duplicate submissions or procurements either before or after testing had commenced. Many of the chemicals submitted by cooperators were not identified at the time the tests were conducted, and some remain unidentified. The identities of most of these chemicals were obtained from the cooperator and/or through commercial or published sources. Almost all chemicals tested after 1967 were required to be identified at least by chemical type or name before they were accepted for testing.

Previous repellent and toxicity screening efforts with approximately 7,000 chemicals on rats and other mammals were conducted by J.B. DeWitt, a researcher at the DRL, and by scientists at the Patuxent Wildlife Research Center (PWRC). The studies were conducted for the U.S. Army Chemical Corps, Natick Laboratories, and other cooperators. These were assigned codes beginning with a "DR" (for DeWitt Research) designation. Work under the DR code occurred from 1943 through 1959. Some of these data are reported in 3 publications of limited distribution (DeWitt et al. 1953, Bellack et al. 1953, Bowles et al. 1974) and one unpublished written listing (DeWitt 1968). The records for many of these tests and a written listing of the results of testing conducted from 1959 through 1960 were transferred to the DWRC in 1965 and reside in the NWRC archives.

No attempt has been made in this publication, or in previous NWRC publications, to cross-reference or cross-index the DR and DRC data. However, efforts are now underway at the NWRC to exhaustively review the DR data for new information and to cross-index the DR and DRC data by Chemical Abstract Service Registry Numbers (CASRN).

The first publication of summarized NWRC data (Schafer et al. 1983) covered the results of acute toxicity or repellency studies conducted on wild and domestic birds with 998 chemicals for which CASRNs had been identified.

The second publication (Schafer and Bowles 1985) summarized the results of acute toxicity and repellency tests conducted on wild and domestic mice with 933 chemicals for which CASRNs had been identified.

The data that were selected for this 2003 publication include new and supplemental information on 979 chemicals. This publication includes data from studies conducted with chemicals having identified CASRNs, and that were conducted under the

same standardized conditions that were outlined in the previous publications. The sources for these data include hand-written summary lists, hand-written data entries on McBee keysort cards, mechanically reproduced printouts prepared from IBM key-punch cards, typed or mimeographed summary records prepared for other purposes, typed or hand-written summary data sheets, and typed or written raw data sheets, all of which are maintained in the NWRC Archives.

A priority system was used to give precedence to sources of individual data entries that contained the most information. If available, raw or summary data sheets were the primary sources; typed, mimeographed or mechanically reproduced summary records were considered as secondary sources; and the hand-written lists or McBee key-sort records were considered tertiary sources. In cases where 2 similar levels of records were available (i.e., raw or summary data sheets), the source with the most complete information was used. If 2 or more sources contained results that were different, both sets of results were used.

In summary, previous NWRC publications presented bird and mammal data extracted from almost 3,800 individual studies that were conducted with 1,530 chemicals. The data contained in this publication expand the previously reported coverage by 675 chemicals and expand the number of data records reviewed to approximately 7,600. The data presented in this publication resulted from searches conducted between 1997 and 2001. Because tabular data were collected and formatted separately during some of the phases of this effort and depended upon the nature of the data being reviewed, the content and arrangement of the tables presented in this publication reflect the changes in the types of data reviewed during this 5-year effort.

A considerable amount of information remains in the NWRC Archives for studies

that were conducted under less standardized and nonstandardized conditions (concentration/ effect bioassays for mammals, bait formulation studies for rodenticides, secondary hazard studies for wild and domestic mammals, vegetation feeding studies for foliar-applied and translocated chemicals, etc.).

There are also more data available, but not summarized, on another 3,000 chemicals for which specific identification has not been made (chemical name or structure). Some chemical companies have agreed to identify a number of the unidentified chemicals and we will publish these data as soon as we have enough information to compile another summary document. We have also summarized, but not published, standardized data for approximately 380 chemicals for which the chemical structure and/or name is known, but no CASRN has been identified. New and supplemental data are also being reviewed from archived DR records for additional publications as resources permit.

Collectively, the DRC and DR data represent a substantial source of information on the toxicity and repellency of over 10,000 chemicals. The depth of information available in the database will be invaluable for individuals interested in advancing the science of environmental risk management or interested in the development of new vertebrate pest management tools.

NWRC TOXICITY DATABASE

The NWRC Toxicity Database is a SAS-based, searchable, in-house database that contains records and data for identified chemicals that were tested by the NWRC and its predecessors from 1959 to 1987. The NWRC database contains information about each DRC-numbered chemical; summaries of all known bioassay tests performed by the NWRC (including some DR data); the source of the chemical; an indication of the acute toxicity of the chemical to domestic species (taken from the Registry of Toxic Effects of

Chemical Substances [RTECS], U. S. Department of Health and Human Services); and whether some or all of the data have been published. Although the NWRC Toxicity Database is currently searchable only by NWRC staff, considerable effort is being devoted to developing the database so that it can be searched online through the NWRC website.

METHODS — BIRDS

Birds used in these tests were wild-trapped, purchased, or captive reared. The test procedures were described in detail in Schafer et al. (1983) and are presented only in very abbreviated form in this paper. The following abbreviations are used to denote the results of tests that are presented to evaluate the effects of chemicals on wild or domestic birds.

Repellency

R50 (%) — The R50 (%) value is the estimated concentration at which half of the birds tested would consume 12 or less de-hulled white rice (*Oryza sativa*) or grain sorghum (*Sorghum vulgare*) seeds per day out of 25 seeds offered over an 18-hour period. This no-choice test was developed by Starr et al. (1964), was modified by Schafer and Brunton (1971), and represents severe test conditions for birds.

Toxicity

ALD (mg/kg) — The reported ALD is the lowest dose at which mortality occurred in acute oral or dermal approximate lethal dose studies. The studies utilized a progressive dosing method (up and down), using 1 or 2 birds per treatment level followed by either 3 or 7 days of observations for mortality. This method is described in detail in Schafer and Bowles (1985).

LD50 (mg/kg) — An acute oral, dermal, inhalation, or intramuscular method that estimates the concentration at which half of

the 2–6 birds tested at each concentration would be expected to die during the following 7-day observation period. Dermal application was made to the skin on an unfeathered area of the breast or to the pad of the foot, intramuscular injections were made into the breast muscle, and inhalation toxicity was determined in a flow-through inhalation chamber for a period of 1 hour. The oral method is described in detail in Schafer et al. (1983) and the dermal method is described in detail in Shefte et al. (1982).

LD_{ad} (mg/kg/18hr) — A subacute oral toxicity value derived from the R50 test that presents the average amount of chemical ingested by each test bird over the 18-hour test period at the test concentration (normally 2%). If greater than 50% mortality occurred in the test, the *LD_{ad}* value is preceded by a < sign; if less than 50% mortality occurred, the value is preceded by a > sign.

METHODS — MAMMALS

Mammals used in these tests were wild-trapped, purchased, or captive reared. The basic test procedures were developed by Kverno (1954), Kverno and Hood (1963), and Kverno et al. (1967), and are also summarized by Schafer and Bowles (1985); they are presented only in abbreviated form in this publication. The following abbreviations are used to denote the results of individual tests that are presented to evaluate the effects of chemicals on wild or domestic mammals:

Repellency

FR (%) — The FR value represents the results of a 3-day food aversion test where mammals were offered 25 2%-treated white wheat (*Triticum aestivum*) seeds each day and an alternate, less preferred food. The total number of treated seeds that were not consumed divided by the total number available is expressed as a percentage reduction from total possible consumption.

FRdf (%) — The FRdf is similar to the FR test, but the concentration used was 1% and the 50 seeds offered daily were Douglas fir (*Pseudotsuga menziesii*). Results of additional tests are also reported for other species of conifers. Because the size of the seeds varied in weight among species, these tests used either 25 or 50 seeds.

FRxx (%) — The FRxx is similar to the FR test, but the concentration used was 1% and the 50 seeds offered daily were ponderosa pine (*Pinus ponderosa*) or Douglas fir (*Pseudotsuga menziesii*). Unless otherwise noted, the mammal tested was the deer mouse (*Peromyscus maniculatus*).

R50 (%) — The R50 represents the estimated concentration at which half of the mammals tested would consume less than 50% of the 25 treated wheat seeds offered each day over a 5-day test period. This choice test (a less preferred alternate food was provided) was developed by Kverno (1954) and was modified by Kverno et al. (1967).

REP (%) — The REP value was generated from a repellency test that was similar to the FR test but it was conducted for 5 days, usually with 10 animals given 25 white wheat seeds daily. The presented value is the percentage of animals tested that consumed a daily average of 12 or less seeds treated with 2% of the test chemical.

Toxicity

ALD (mg/kg) — The ALD represents an acute oral approximate lethal dose progressive method (up and down), generally using a single mammal per treatment level (occasionally 2 or more mammals were used) followed by either 3 or 7 days of observations for mortality. The ALD is the lowest dose at which mortality occurred.

LD50 (mg/kg) — The LD50 represents an acute oral, dermal, intraperitoneal, or intraocular method that estimates the

concentration at which half of the 2-6 mammals tested at each concentration would be expected to die during the following 7 to 14-day observation period. The gavage method is described in detail in Schafer and Bowles (1985), but was appropriately modified for dermal, intraperitoneal, or intraocular applications to a few mammals.

LDfr (mg/kg/day) — The LDfr represents a subacute toxicity value derived from the FR test that represents the estimated daily amount of chemical ingested by test mammals over the 3-day test period when food was treated at a 2% concentration. If greater than a 50% mortality occurred in the test, the *LDfr* value is preceded by a < sign; if less than 50% mortality occurred, the value is preceded by a > sign.

METHODS — PLANTS

Plants used in these tests were reared in the greenhouse to the stage of development required for testing. Seeds were purchased from commercial sources. The test procedures used in this publication have previously been described in detail by Kverno (1954), Kverno and Hood (1963) and Kverno et al. (1967) and are presented in a less abbreviated form in this publication. This is the first time these data have been summarized by NWRC. In the tabular information that follows, the following abbreviations are used to denote the results of the tests designated to evaluate the phytotoxic effects of chemicals on wild or domestic plants or seeds.

Foliar Phytotoxicity

FPT (%) — The FPT value was derived from a plant test where the leaves of young plants [6 pinto bean (*Phaseolus vulgaris*), 6 corn (*Zea mays*), 10 common wheat (*Triticum aestivum*) or 4 Douglas fir (*Pseudotsuga menziesii*) seedlings] grown in pots were sprayed with a single concentration of the candidate chemical until the leaves were thoroughly wet. Concentrations used were

normally 1.0% and 6.0%, but ranged from 0.3% to 10%. Water, carbopol or acetone were used as carriers and the observation period was generally 6 to 7 days. Observations for phytotoxic effects were made every other day. Phytotoxic signs observed on 1 or more plants (wilting, yellowing, burning, stunting) constituted a phytotoxic effect at that treatment concentration. Douglas fir seedlings were 1 year old; corn, wheat and pinto bean seedlings were 1 week old when treated; concurrent controls were also used. Presented values, or value ranges (ie, >1.0%, <6.0%) represent projected phytotoxic concentrations determined by monitoring the appearance of the sprayed leaves/plants for signs of phytotoxicity.

Seed Germination

SGR (%) — The SGR value was derived from a plant test where 100 to 500 seeds of the test species were rolled into germination towels or placed in vermiculite, wetted, and incubated in a bench-top seed germinator for 7 days at 100°F; concurrent controls were also used and conifer seeds were scarified before treatment. From 10g to 100g of the test seed were treated with 2% (w/w) of the candidate chemical using a suitable carrier, such as acetone or water. Values presented represent the percent germination of treated seeds (generally counted 3 and 7 days post-treatment) compared to controls at the end of the test period. Conifer seeds were evaluated over a 14-day test period, with observations made 7 and 14 days post-treatment. The appearance of germinating seedlings was recorded but was not used to establish phytotoxicity values for these evaluations.

METHODS — SPECIES TESTED

The common, scientific names and 4-letter codes used to describe each of the 76 wild and domestic animal and plant species included in this publication are described in

Table 1. A phylogenetic listing of these species is presented in Table 2.

METHODS — CHEMICALS TESTED

A listing of the 979 chemicals that were tested (generally technical grade pesticides, experimental chemicals or commercially available laboratory chemicals) is presented in Table 3. Chemicals were purchased from commercial sources or were contributed by cooperating chemical companies, research personnel or government agencies. They are arranged in ascending order by CASRN and are identified by a single accepted common or trade name, a short chemical name that is usually not used in the 9th Collective Index of the Chemical Abstracts Service, or, occasionally, by a chemical company code number. Only chemicals for which CASRN have been assigned and identified are included in this publication.

RESULTS — BIRDS

The results of repellency and toxicity tests conducted with 395 chemicals on 26 species of wild and domestic birds are presented in Tables 4 and 5 according to the CASRN. In addition to the bird data, the Tables also include the DRC number. Table 4 contains an indication of whether data on a particular CASRN were published in Schafer et al. (1983); a "yes" indicates other NWRC data were published in 1983, and a "new" indicates that data for this CASRN have not been published previously. In Table 5, the "yes" indicates that other data were either published in 1983 or data were included in Table 4, and a "new" indicates that data for this CASRN have not been published previously. Of the 395 included chemicals, the NWRC has previously published other summary bird data on 184 of these chemicals.

Of the 395 chemicals tested, a single measure of repellency is presented for 270 chemicals representing 10 species (313

tests). One or more measures of acute oral, dermal, or intramuscular toxicity were available for 345 chemicals (618 tests) with 26 species to determine acute LD50s. Seventy-eight LD50 tests were acute dermal (9 species), 1 was intramuscular (redwings), and 1 was inhalation (coturnix). Thirty-eight oral ALD tests were conducted with 7 species (1 test used dermal application). In addition, 48 tests were conducted to determine subacute oral toxicity with red-winged blackbirds. No statistical correlations were attempted between any of these data because of the variety of tests and number of species involved.

RESULTS — MAMMALS

The results of acute toxicity, subacute toxicity, and repellency tests conducted with 653 chemicals on 34 species of wild and domestic mammals are presented in Tables 6, 7 and 8 according to ascending CASRN. In addition to the mammal data, Table 6 also includes the DRC number and whether additional data on the specific chemical were published in Schafer and Bowles (1985). A "yes" indicates that the NWRC published other mammal data for this CASRN in 1985, and a "new" indicates that data for the CASRN were not included in the 1985 publication. In Tables 7 and 8, the "yes" indicates that other data for the chemical have either been previously published or are included in 1 of the previous tables. The NWRC has published other summary mammal data on 327 of the 653 chemicals.

Seven bioassay measures of acute toxicity, subacute toxicity, and repellency were estimated under laboratory conditions. Two measures of acute oral, dermal, intraocular, or interperitoneal toxicity (ALD or LD50) are described for 345 chemicals and 27 species of mammals (692 tests). Two hundred twenty-four ALDs are also reported for 209 chemicals on 19 species of wild or domestic mammals. Four hundred sixty-eight LD50s are reported for 227 chemicals on 24 species of wild or domestic mammals. In addition, 1

measure of subacute oral toxicity on 7 species of mammals is described for 447 chemicals (581 tests) and 4 measures of repellency are also presented for 485 chemicals and 8 species of mammals (745 tests). No statistical correlations were attempted between any of these data because of the variety of tests and number of species involved.

RESULTS — PLANTS

The results of foliar phytotoxicity and seed germination toxicity tests conducted with 222 chemicals on 16 species of wild and domestic plants are presented in Tables 9 and 10 according to ascending CASRN. In addition to the plant data, the tables also include the DRC number and in Table 10 an indication of whether additional data on the chemical are included in Table 9. This publication represents the first NWRC effort to publish the summary results of phytotoxicity screening tests with plants.

Two bioassay measures of foliar or seed phytotoxicity were estimated under laboratory conditions. A single evaluation of the effects of 206 chemicals on the germination of the seeds of 14 species of wild and domestic plants are summarized (383 tests). The presented value (i.e., SGR: 94%) represents the relative percentage germination of seeds treated with 2.0% of the candidate chemical at the end of the 6 to 14-day observation period. Only plants that continued to develop throughout the observation period were counted as germinated. SGR values were adjusted for control seed germination.

A single measure of the effects of chemicals applied to the leaves of 7 species of young plants is also described for 101 chemicals representing 365 individual tests. The presented value (i.e., FPT: >1.0%), or value ranges (FPT: >1.0 %, <6.0%) are projected phytotoxic concentrations or phytotoxic concentration ranges for the candidate chemical. These effects were determined by monitoring the appearance of the sprayed

leaves/plants for signs of phytotoxicity, most often apparent by the burning or yellowing of the deciduous plants or by the burning of the conifer seedlings.

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LITERATURE CITED

BELLACK, E., J. B. DEWITT, AND R. TREICHLER. 1953. Relationship between chemical structure and rat repellency. Chemical-Biological Coordination Center, National Research Council, Washington D.C., USA.

BOWLES, W. A., V. A. ADOMAITIS, J. B. DEWITT, AND J. J. PRATT JR. 1974. Relationship between chemical structure and rat repellency. II. Compounds screened between 1950 and 1960. U.S. Army, Natick Labs Technical Report 75-11-FEL. Natick, Massachusetts, USA.

DEWITT, J. B., E. BELLACK, C. W. KLINGENSMITH, J. C. WARD, AND R. TREICHLER. 1953. Relationship between chemical structure and toxic action on rats. Chemical-Biological Coordination Center, National Research Council, Washington D.C., USA.

DEWITT, J. B. 1968. Relationship between chemical structure and toxic action on rats. Unpublished written list, Patuxent Wildlife Research Center, Laurel, Maryland, USA.

KVERNO, N. B. 1954. Development of better seed protectants. *Journal of Forestry* 52:826-827.

KVERNO, N. B. AND G. A. HOOD. 1963. Evaluation procedures and standards; chemical screening and development for forest wildlife damage. U. S. Fish and Wildlife Service, Denver Wildlife Research Center Report.

KVERNO, N. B., G. A. HOOD, AND W. E. DODGE. 1967. Development of chemicals to control forest wildlife damage. *Proceedings of the Society of American Foresters* 65:222-226.

SCHAFFER, E. W. JR., AND W. A. BOWLES JR. 1985. Acute oral toxicity and repellency of 933 chemicals to house and deer mice. *Archives of Environmental Contamination and Toxicology* 14:111-129.

SCHAFFER, E. W. JR., W. A. BOWLES JR., AND J. HURLBUT. 1983. The acute oral toxicity and repellency and hazard potential of 998 chemicals to one or more species of wild and domestic birds. *Archives of Environmental Contamination and Toxicology* 12:355-382.

SCHAFER, E. W. JR., AND R. B. BRUNTON. 1971. Chemicals as bird repellents — two promising agents. *Journal of Wildlife Management* 35:569-572.

SHEFTE, N., R. L. BRUGGERS, AND E. W. SCHAFER JR. 1982. Repellency and toxicity of three bird control chemicals to four species of African grain-eating birds. *Journal of Wildlife Management* 46:453-457.

STARR, R. I., J. F. BESSER, AND R. B. BRUNTON. 1964. A laboratory method for evaluating chemicals as bird repellents. *Journal of Agricultural and Food Chemistry* 12:342-344.

Table 1. Code, common and scientific name of birds, mammals and plants identified in this publication.

Code	Common Name	Scientific Name
arob	American robin	<i>Turdus migratorius</i>
bbba	Big brown bat	<i>Eptesicus</i> sp.
bbmp	Black-billed magpie	<i>Pica pica</i>
bbru	Bitterbrush	<i>Purshia tridentata</i>
bhcb	Brown-headed cowbird	<i>Molothrus ater</i>
btgr	Boat-tailed grackle	<i>Quiscalus major</i>
btjr	Black-tailed jackrabbit	<i>Lepus californicus</i>
btpd	Black-tailed prairie dog	<i>Cynomys ludovicianus</i>
budg	Budgerigar	<i>Melopsittacus undulatus</i>
bwal	Black walnut	<i>Juglans nigra</i>
bwqu	Northern bobwhite	<i>Colinus virginianus</i>
cags	California ground squirrel	<i>Spermophilus beecheyi</i>
cgoo	Canada goose	<i>Branta canadensis</i>
cgra	Common grackle	<i>Quiscalus quiscula</i>
corn	Corn	<i>Zea mays</i>
cotq	Japanese quail	<i>Coturnix coturnix japonica</i>
coyo	Coyote	<i>Canis latrans</i>
cpig	Rock dove (common pigeon)	<i>Columba livia</i>
crat	Cotton rat	<i>Sigmodon hispidus</i>
crav	Common raven	<i>Corvus corax</i>
dfir	Douglas fir	<i>Pseudotsuga menziesii</i>
dgot	Domestic goat	<i>Capra hircus</i>
drab	Domestic rabbit	<i>Oryctolagus cuniculus</i>
dshe	Domestic sheep	<i>Ovis aries</i>
erat	Polynesian rat	<i>Rattus exulans</i>
espr	Englemann's spruce	<i>Picea engelmannii</i>
gerb	Gerbil	<i>Gerbillus</i> spp.
gmgs	Golden-mantled ground squirrel	<i>Spermophilus lateralis</i>
hfin	House finch	<i>Carpodacus mexicanus</i>
hmou	Harvest mouse	<i>Reithrodontomys megalotis</i>
hmus	House mouse	<i>Mus musculus</i>
hspa	House (English) sparrow	<i>Passer domesticus</i>
krat	Kangaroo rat	<i>Dipodomys spectabilis</i>
lett	Lettuce	<i>Lactuca sativa</i>
llpn	Longleaf pine	<i>Pinus palustris</i>
logp	Lodgepole pine	<i>Pinus contorta</i>
lpin	Loblolly pine	<i>Pinus taeda</i>
mald	Mallard	<i>Anas platyrhynchos</i>
mdov	Mourning dove	<i>Zenaida macroura</i>
mink	Mink	<i>Mustela vison</i>
mmou	Meadow mouse	<i>Microtus californicus</i>
mpar	Monk parakeet	<i>Myiopsitta monachus</i>
mudr	Mule deer	<i>Odocoileus hemionus</i>
mvol	Meadow vole	<i>Microtus pennsylvanicus</i>
nngo	Northern pocket gopher	<i>Thomomys talpoides</i>

Table 1. (cont.)

Code	Common Name	Scientific Name
nrat	Norway rat	<i>Rattus norvegicus</i>
nutr	Nutria	<i>Myocaster coypus</i>
perg	Cotton mouse	<i>Peromyscus gossypinus</i>
pero	Deer mouse	<i>Peromyscus maniculatus</i>
pmou	Pine mouse	<i>Microtus pinetorum</i>
pnpn	Pinyon pine	<i>Pinus edulis</i>
ppin	Ponderosa pine	<i>Pinus ponderosa</i>
ppgo	Plains pocket gopher	<i>Geomys bursarius</i>
ptbn	Pinto bean	<i>Phaseolus vulgaris</i>
rata	Ricefield rat	<i>Rattus argentiventer</i>
ratm	Rice rat	<i>Oryzomys palustris</i>
rbqu	Red-billed quelea	<i>Quelea quelea</i>
rigs	Richardson's ground squirrel	<i>Spermophilus richardsonii</i>
rnph	Ring-necked pheasant	<i>Phasianus colchicus</i>
rrat	Roof (black) rat	<i>Rattus rattus</i>
rwbb	Red-winged blackbird	<i>Agelaius phoeniceus</i>
slap	Slash pine	<i>Pinus caribaea</i>
slpn	Shortleaf pine	<i>Pinus echinata</i>
soyb	Soybean	<i>Glycine max</i>
star	European starling	<i>Sturnus vulgaris</i>
stgr	Sharp-tailed grouse	<i>Tympanuchus phasianellus</i>
tcbb	Tri-colored blackbird	<i>Agelaius tricolor</i>
tlgs	Thirteen-lined ground squirrel	<i>Spermophilus tridecemlineatus</i>
valq	California quail	<i>Calipepla californica</i>
vbat	Vampire bat	<i>Desmodus rotundus</i>
vwea	Village weaver	<i>Ploceus cucullatus</i>
wchi	Western chipmunk	<i>Eutamias quadrivittatus</i>
whea	Common wheat	<i>Triticum aestivum</i>
wrat	Wood rat	<i>Neostoma mexicana</i>
wwdo	White-winged dove	<i>Zenaida asiatica</i>
yhbb	Yellow-headed blackbird	<i>Xanthocephalus xanthocephalus</i>

Table 2. Phylogenetic identification of mammals, birds and plants identified in this publication.

Common Name	Scientific Name	Code
MAMMALS		
Order Chiroptera		
Family Phyllostomidae		
Vampire bat	<i>Desmodus rotundus</i>	vbat
Family Vespertilionidae		
Big brown bat	<i>Eptesicus</i> sp.	bbba
Order Carnivora		
Family Canidae		
Coyote	<i>Canis latrans</i>	coyo
Family Mustelidae		
Mink	<i>Mustela vison</i>	mink
Order Artiodactyla		
Family Bovidae		
Domestic goat	<i>Capra hircus</i>	dgot
Domestic sheep	<i>Ovis aries</i>	dshe
Family Cervidae		
Mule deer	<i>Odocoileus hemionus</i>	mudr
Order Rodentia		
Suborder Sciurognathi		
Family Sciuridae		
Black-tailed prairie dog	<i>Cynomys ludovicianus</i>	btpd
California ground squirrel	<i>Spermophilus beecheyi</i>	cags
Golden-mantled ground squirrel	<i>Spermophilus lateralis</i>	gmgs
Richardson's ground squirrel	<i>Spermophilus richardsonii</i>	rigs
Thirteen-lined ground squirrel	<i>Spermophilus tridecemlineatus</i>	tlgs
Western chipmunk	<i>Tamias quadrivittatus</i>	wchi
Family Geomysidae		
Northern pocket gopher	<i>Thomomys talpoides</i>	npgo
Plains pocket gopher	<i>Geomys bursarius</i>	ppgo
Family Heteromyidae		
Kangaroo rat	<i>Dipodomys spectabilis</i>	krat
Family Muridae		
Gerbil	<i>Gerbillus</i> sp.	gerb
Subfamily Arvicolinae		
Meadow mouse	<i>Microtus californicus</i>	mmou
Meadow vole	<i>Microtus pennsylvanicus</i>	mvol
Pine mouse	<i>Microtus (Pitymys) pinetorum</i>	pmou
Subfamily Murinae		
House mouse	<i>Mus musculus</i>	hmus
Ricefield rat	<i>Rattus argentiventer</i>	rata
Polynesian rat	<i>Rattus exulans</i>	erat
Norway rat	<i>Rattus norvegicus</i>	nrat
Roof (black) rat	<i>Rattus rattus</i>	rrat

Table 2. (Cont.)

Common Name	Scientific Name	Code
MAMMALS (cont.)		
Subfamily Sigmodontinae		
Rice rat	<i>Oryzomys palustris</i>	ratm
Deer mouse	<i>Peromyscus maniculatus</i>	pero
Harvest mouse	<i>Reithrodontomys megalotis</i>	hmou
Cotton rat	<i>Sigmodon hispidus</i>	crat
Cotton mouse	<i>Peromyscus gossypinus</i>	perg
Wood rat	<i>Neotoma mexicana</i>	wrat
Order Rodentia		
Family Heptaxodontidae		
Nutria	<i>Myocaster coypus</i>	nutr
Order Lagomorpha		
Family Leporidae		
Black-tailed jackrabbit	<i>Lepus californicus</i>	btjr
Domestic rabbit	<i>Oryctolagus cuniculus</i>	drab
BIRDS		
Order Anseriformes		
Family Anatidae		
Subfamily Anserinae		
Canada goose	<i>Branta canadensis</i>	cgoo
Subfamily Anatiniae		
Mallard	<i>Anas platyrhynchos</i>	mald
Order Galliformes		
Family Phasianidae		
Subfamily Pasianiniae		
Common (Coturnix) quail	<i>Coturnix coturnix</i>	cotq
Ring-necked pheasant	<i>Phasianus colchicus</i>	rnph
Subfamily Tetraoniniae		
Sharp-tailed grouse	<i>Tympanuchus phasianellus</i>	stgr
Subfamily Odontophoriniae		
Northern bobwhite	<i>Colinus virginianus</i>	bwqu
California quail	<i>Callipepla californica</i>	valq
Order Columbiformes		
Family Columbidae		
Rock dove (common pigeon)	<i>Columba livia</i>	cpig
White-winged dove	<i>Zenaida asiatica</i>	wwdo
Mourning dove	<i>Zenaida macroura</i>	mdov
Order Psittaciformes		
Family Psittacidae		
Subfamily Platycercinae		
Budgerigar	<i>Melopsittacus undulatus</i>	budg
Subfamily Arinae		
Monk parakeet	<i>Myiopsitta monachus</i>	mpar

Table 2. (Cont.)

Common Name	Scientific Name	Code
BIRDS (cont.)		
Order Passeriformes		
Suborder Passeres		
Family Corvidae		
Black-billed magpie	<i>Pica pica</i>	bbmp
Common raven	<i>Corvus corax</i>	crav
Family Muscicapidae		
American robin	<i>Turdus migratorius</i>	arob
Family Sturnidae		
Subfamily Sturninae		
European starling	<i>Sturnus vulgaris</i>	star
Family Emberizidae		
Subfamily Icterinae		
Red-winged blackbird	<i>Agelaius phoeniceus</i>	rwbb
Tricolored blackbird	<i>Agelaius tricolor</i>	tcbb
Yellow-headed blackbird	<i>Xanthocephalus xanthocephalus</i>	yhbb
Boat-tailed grackle	<i>Quiscalus major</i>	btgr
Common grackle	<i>Quiscalus quiscula</i>	cgra
Brown-headed cowbird	<i>Molothrus ater</i>	bhcb
Family Fringillidae		
House finch	<i>Carpodacus mexicanus</i>	hfin
Family Passeridae		
House (English) sparrow	<i>Passer domesticus</i>	hspa
Family Ploceidae		
Village weaver	<i>Ploceus cucullatus</i>	vwea
Red-billed quelea	<i>Quelea quelea</i>	rbqu
PLANTS		
Order Gymnospermae		
Family Pinaceae		
Pinyon pine	<i>Pinus edulis</i>	pnpn
Ponderosa pine	<i>Pinus ponderosa</i>	ppin
Lodgepole pine	<i>Pinus contorta</i>	logp
Longleaf pine	<i>Pinus palustris</i>	llpn
Slash pine	<i>Pinus caribaea</i>	slap
Shortleaf pine	<i>Pinus echinata</i>	slpn
Loblolly pine	<i>Pinus taeda</i>	lpin
Englemann's spruce	<i>Picea engelmannii</i>	espr
Douglas fir	<i>Pseudotsuga menziesii</i>	dfir
Order Angiospermae		
Suborder Monocotyledon		
Family Poaceae/Gramineae		
Common wheat	<i>Triticum aestivum</i>	whea
Suborder Dicotyledon		
Family Rosaceae		
Bitterbrush	<i>Purshia tridentata</i>	bbru
Family Juglandaceae		
Black walnut	<i>Juglans nigra</i>	bwal

Table 2. (Cont.)

Common Name	Scientific Name	Code
PLANTS (cont.)		
Family Leguminosae/Papilionoideae		
Soybean	<i>Glycine max</i>	soyb
Pinto bean	<i>Phaseolus vulgaris</i>	ptbn
Family Asteraceae/Compositae		
Lettuce	<i>Lactuca sativa</i>	lett

Table 3. CAS Registration Number and chemical/common/trade names of chemicals listed in this publication. [Table number where data are located.]

CAS Reg. No. NAME

50-29-3	4,4'-DDT [5,8]
50-78-2	Acetylsalicylic acid [6]
51-17-2	Benzoximidazole [6]
52-60-8	O,O-Diethyl O-(4-(methylthio)-3,5-xylyl) phosphorothioate [6]
52-66-4	D,L-Penicillamine [6]
54-11-5	Nicotine alkaloid [8]
54-71-7	Pilocarpine hydrochloride [7]
54-95-5	1 <i>H</i> -Tetrazole [4]
54-96-6	3,4-Diaminopyridine [7]
55-22-1	4-Picolinic acid [7]
55-37-8	O,O-Dimethyl O-(3,5-dimethyl-4-(methylthio)phenyl) phosphorothioate [4,6,7,9,10]
55-38-9	Fenthion [4,7,9]
55-48-1	Atropine sulfate [5]
56-35-9	Tributyltin oxide [6,8]
56-36-0	Tributyltin acetate [6,7,9]
56-38-2	Parathion [4,5,8]
56-53-1	Diethylstilbestrol [10]
56-72-4	Coumaphos [9]
56-92-8	Histamine dihydrochloride [6]
57-24-9	Strychnine alkaloid [4,5,6,7,8]
57-71-6	Diacetyl monoxime [6]
57-95-4	Tubocurarine [6]
58-08-2	Caffeine [4,9]
58-36-6	Bis(10-phenoxyarsinyl) oxide [4,6,7,9]
58-89-9	Lindane [4,9]
59-66-5	Acetazolamide [6]
59-67-6	Nicotinic acid [7]
60-10-6	Dithizone [6]
60-41-3	Strychnine sulfate [4,6,9]
60-51-5	Dimethoate [9]
61-82-5	Aminotriazole [5]
62-53-3	Aminobenzene [7]
62-73-7	Dichlorvos [4]
62-74-8	Sodium fluoroacetate [4]
63-25-2	Carbaryl [4,7,9,10]
63-99-0	3-Methylphenylurea [7]
64-47-1	Physostigmine sulfate [7]
64-73-3	Declomycin [4]
64-86-8	Colchicine [4]
65-30-5	Nicotine sulfate [4,9]
66-25-1	Hexanal [4]
67-51-6	3,5-Dimethylpyrazole [6]
67-64-1	Acetone [4,8]
70-22-4	Oxotremorine [8]
70-55-3	4-Toluenesulfonamide [7]
71-27-2	Succinylcholine chloride [4,6]
72-00-4	Dichlorvos-ethyl [4,9,10]
72-20-8	Endrin [4,5,7,8,10]
72-33-3	Mestranol [6]
75-05-8	Acetonitrile [6]
75-08-1	Ethanethiol [6]

Table 3. (cont.)**CAS Reg. No. NAME**

76-24-4	Alloxanthin [7]
76-63-1	Allyltriphenyltin [7,9,10]
76-87-9	Triphenyltin hydroxide [6,9]
77-26-9	Butalbital [4]
77-58-7	Dibutyltin dilaurate [9]
77-80-5	Bis(triphenyltin)sulfide [7,9]
78-04-6	Dibutyltin maleate [9,10]
78-34-2	Dioxathion [4]
78-57-9	Menazon [7]
78-70-6	Linalool [5]
79-19-6	Thiosemicarbazide [7]
80-00-2	Sulphenone [4]
80-08-0	Dapsone [4,7]
80-12-6	Tetramine [9]
81-14-1	Musk ketone [6]
81-16-3	2-Amino-1-naphthalenesulfonic acid [6]
81-81-2	Coumadin [6,7]
81-88-9	Rhodamine B [6,7,9]
82-43-9	1,8-Dichloroanthraquinone [9]
82-46-2	1,5-Dichloroanthraquinone [7]
82-75-7	1-Amino-8-naphthalene sulfonic acid [6]
82-86-0	Acenaphthenedione [7]
83-07-8	4-Aminoantipyrene [6,7,9,10]
83-34-1	3-Methylindole [6, 7]
83-52-3	4-Hydrazino-1,2,3-benzothiadiazine-1,1-dioxide hydrochloride [4]
83-62-5	1-Aminoanthraquinone-2-sulfonic acid [4]
84-89-9	5-Amino-1-naphthalene sulfonic acid [6]
85-91-6	Dimethylanthranilate [4,6]
86-50-0	Azinphos-methyl [4,6]
86-88-4	1-Naphthylthiourea [6,8]
87-10-5	3,4,5-Tribromosalicylanilide [4,6,8]
87-47-8	Pyrolan [6]
87-51-4	3-Indoleacetic acid [6]
87-66-1	Pyrogallol [6]
87-88-7	4-Chloranilic acid [7]
88-04-0	4-Chloro-3,5-xylenol [9]
88-12-0	1-Vinyl-2-pyrrolidinone [6]
88-29-9	Versalide [6]
88-68-6	2-Aminobenzamide [7]
88-74-4	2-Nitroaniline [7]
88-82-4	2,3,5-Triiodobenzoic acid [6]
89-25-8	Norphenazone [7]
89-69-0	1,2,4-Trichloro-5-nitrobenzene [9,10]
89-84-9	2,4-Dihydroxyacetophenone [7]
90-02-8	Salicylaldehyde [6]
90-04-0	2-Methoxyaniline [7]
91-02-1	2-Benzoylpyridine [7]
91-10-1	Syringol [6]
91-44-1	7-Diethylamino-4-methylcoumarin [7]
91-55-4	2,3-Dimethylindole [6]
91-56-5	2,3-Indolinedione [7]
92-52-4	Biphenyl [7]

Table 3. (cont.)**CAS Reg. No. NAME**

92-71-7	2,5-Diphenyloxazole [7]
93-04-9	Nerolin [6]
93-75-4	Thioquinox [4,7,9,10]
94-24-6	Tetracaine [4,8]
94-86-0	2-Ethoxy-5-propenylphenol [6,8]
95-16-9	Benzothiazole [7]
95-26-1	2,5-Dimethylbenzothiazole [6]
95-51-2	2-Chloroaniline [4,6]
95-53-4	2-Methylaniline [6,7]
95-54-5	1,2-Diaminobenzene [7]
95-55-6	2-Aminophenol [7]
95-69-2	4-Chloro-2-methylaniline [6,9]
95-74-9	3-Chloro-4-methylbenzenamine [4,9]
95-76-1	3,4-Dichloroaniline [6]
95-81-8	2-Chloro-5-methylaniline [4]
95-87-4	2,5-Dimethylphenol [5,8]
95-88-5	4-Chlororesorcinol [6,8]
96-24-2	<i>alpha</i> -Chlorohydrin [6,8]
96-48-0	<i>gamma</i> -Butyrolactam [4,6]
96-50-4	2-Aminothiazole [6]
96-53-7	2-Mercaptothiazoline [6,9]
96-96-8	4-Amino-3-nitroanisole [6]
97-00-7	2,4-Dinitrochlorobenzene [8,10]
97-08-5	3-Nitro-4-chlorobenzenesulfonyl chloride [7]
98-01-1	Furaldehyde [7]
98-58-8	4-Bromobenzenesulfonyl chloride [7]
98-98-6	Picolinic acid [7]
99-05-8	3-Aminobenzoic acid [7]
99-09-2	3-Nitroaniline [7]
99-65-0	1,3-Dinitrobenzene [7]
99-76-3	Methylparaben [4]
99-86-5	Terpilene [5]
99-92-3	4-Aminoacetophenone [7]
99-93-4	4'-Hydroxyacetophenone [6,7]
100-00-5	4-Chloronitrobenzene [5,8]
100-01-6	4-Nitroaniline [4,7]
100-48-1	4-Cyanopyridine [8]
100-55-0	3-Pyridinylmethanol [6]
100-70-9	2-Cyanopyridine [7]
100-71-0	2-Ethylpyridine [7]
101-77-9	4,4'-Diaminodiphenylmethane [7]
101-80-4	4,4'-Oxydiphenylamine [7]
101-83-7	Dicyclohexylamine [5,8]
102-56-7	2,5-Dimethoxyaniline [6]
102-96-5	<i>beta</i> -Nitrostyrene [4,7,9]
103-33-3	Azobenzene [6,9]
104-72-3	1-Phenyldecane [6]
104-94-9	4-Methoxyaniline [4,7]
104-96-1	4-(Methylthio)aniline [6]
105-55-5	1,3-Diethylthiourea [8]
105-81-7	1-Allyl-3-(2-hydroxyethyl)-2-thiourea [6]
106-22-9	Citronellol [5]

Table 3. (cont.)**CAS Reg. No. NAME**

106-24-1	Geraniol [5]
106-44-5	<i>p</i> -Cresol [5,8]
106-47-8	4-Chloroaniline [4,7]
106-49-0	4-Toluidine [7]
106-50-3	1,4-Diaminobenzene [7]
106-51-4	1,4-Benzoquinone [4]
106-90-1	2,3-Epoxypropyl acrylate [5,8]
107-14-2	Chloroacetonitrile [6,7]
107-21-1	1,2-Ethanediol [6]
107-49-3	Tetraethyl pyrophosphate [9]
107-91-5	2-Cyanoacetamide [6]
108-34-9	Pyrazoxon [7,9,10]
108-42-9	3-Chloroaniline [7]
108-44-1	3-Methylaniline [4,7]
108-45-2	1,3-Diaminobenzene [7]
108-67-8	3,5-Simethyltoluene [6]
108-89-4	4-Methylpyridine [7]
108-99-6	3-Methylpyridine [7]
109-00-2	3-Hydroxypyridine [6]
109-06-8	2-Methylpyridine [7]
109-09-1	2-Chloropyridine [6]
109-12-6	2-Aminopyrimidine [5]
109-57-9	1-Allylthiourea [6,8,9]
109-79-5	<i>n</i> -Butylmercaptan [7]
109-80-8	1,3-Dimercaptopropane [7,9]
109-82-0	Methyleneaminoacetonitrile [7]
110-20-3	Acetone semicarbazone [6]
110-54-3	<i>n</i> -Hexane [6]
110-86-1	Pyridine [6]
111-36-4	Butylisocyanate [6]
111-61-5	Ethylstearate [6]
111-86-4	<i>n</i> -Octylamine [6]
111-92-2	Dibutylamine [6,7]
112-20-9	<i>n</i> -Nonylamine [6]
112-55-0	<i>n</i> -Dodecylmercaptan [6]
113-92-8	Chlorpheniramine maleate [9]
114-26-1	Aprocarb [4,7,9]
115-29-7	Endosulfan [4]
115-69-5	Aminoglycol [6,8]
115-78-6	Phosfon [7,9]
115-90-2	Fensulfothion [4,6,7,9,10]
115-91-3	O,O-Dimethyl O-(4-methylsulfinylphenyl) phosphorothioate [7,9]
116-06-3	Temik [9]
116-43-8	Succinylsulphathiazole [7,9]
116-66-5	Moskene [6]
117-78-2	Anthraquinone-2-carboxylic acid [6,9]
118-75-2	Chloranil [4]
118-92-3	2-Aminobenzoic acid [7]
119-38-0	Isolan [4,7,9,10]
120-60-5	3,4-MethylenedioxypheN N-methylcarbamate [8]
120-72-9	Indole [6]
120-75-2	2-Methylbenzothiazole [6]

Table 3. (cont.)**CAS Reg. No. NAME**

121-66-4	2-Amino-5-nitrothiazole [7]
121-75-5	Malathion [6,7,9]
122-10-1	Bomyl [6,7,9,10]
122-14-5	Fenitrothion [4,7,9]
122-15-6	Dimetan [9]
122-88-3	(4-Chlorophenoxy)acetic acid [6]
123-30-8	4-Aminophenol [7]
123-31-9	Hydroquinone [5,8]
123-35-3	Myrcene [5]
123-46-6	Girard's Reagent T [6]
123-69-3	Musk ambrette [6]
124-06-1	Ethylmyristate [6]
126-81-8	Cyclomethone [6]
127-63-9	Phenyl sulfone [5,8]
128-08-5	N-Bromosuccinimide [6]
128-37-0	Butylated hydroxytoluene [5]
128-53-0	N-Ethylmaleimide [5,8]
130-15-4	1,4-Naphthoquinone [6]
130-89-2	Quinine hydrochloride [7]
131-14-6	2,6-Diaminoanthraquinone [7]
132-64-9	Dibenzofuran [6]
133-06-2	Captan [4]
133-07-3	Folpet [6]
134-19-0	2-Methoxy-4-nitro-5--methylaniline [4,7]
135-20-6	Cupferron [7]
136-77-6	Hexylresorcinol [6,8]
137-05-3	Methyl cyanoacrylate [4]
137-26-8	Thiram [4,6,7,8,9]
139-26-4	3-Fluorotyrosin [8,10]
139-65-1	Bis(4-aminophenyl)sulfide [7]
140-53-4	4-Chlorobenzeneacetonitrile [7]
140-56-7	Dexon [6,7,9]
141-66-2	Dicrotophos [4,7,9,10]
141-82-2	Malonic acid [5,8]
142-08-5	2-Hydroxypyridine [6]
142-59-6	Nabam [7,9,]
143-50-0	Kepone [7,9,10]
150-13-0	4-Aminobenzoic acid [7]
150-76-5	4-Methoxyphenol [6]
152-16-9	Schradan [4,6,7,8,9]
289-95-2	Pyrimidine [5]
297-78-9	Isobenzan [4,6,7,8,9]
297-99-4	Phosphamidon [4,9]
298-02-2	Thimet [7]
298-04-4	Disulfoton [4,6,7,9,10]
299-42-3	L-Ephedrine [5]
299-84-3	Fenchlorophos [4,9]
299-85-4	Zytron [7,9]
300-08-3	Arecoline hydrobromide [7]
300-62-9	Amphetamine [5]
301-12-2	Oxydemeton-methyl [5]
302-17-0	Chloral hydrate [7]

Table 3. (cont.)**CAS Reg. No. NAME**

303-21-9	2,4-Dinitrothymol [6,8]
311-47-7	Diethyl chlorovinyl phosphate [9,10]
315-18-4	Mexacarbate [4,7,9,10]
316-42-7	Emetine dihydrochloride [4]
317-34-0	Aminophylline [5]
321-14-2	5-Chlorosalicylic acid [6]
327-98-0	O-Ethyl O-(2,4,5-trichlorophenyl)ethylphosphonothioate [7,10]
328-04-1	O-Isopropyl O-(2-chloro-4-nitrophenyl) ethylphosphonothioate [9]
329-89-5	6-Aminonicitinamide [4,5,6,7,8,9,10]
330-64-3	Disiopropylphenyl N-methylcarbamate [9]
333-29-9	Cyolane [9]
333-41-5	Diazinon [4]
333-43-7	O-Ethyl S-(4-methylphenylethyl) phosphonodithioate [6,7,9,10]
350-03-8	3-Acetylpyridine [6,7]
359-83-1	Pentazocine [4]
379-52-2	Triphenyltin fluoride [9]
404-86-4	Capsaicine [6]
405-41-4	<i>dl</i> -Amphetamine hydrochloride [4]
438-41-5	Chlordiazepoxide hydrochloride [4]
439-14-5	Diazepam [9,10]
452-77-7	3-Fluoro-4-methylaniline [4]
462-08-8	3-Aminopyridine [4,7]
464-31-1	N-Tetrocosane [6]
470-90-6	Chlorfenvinphos [4,6]
485-47-2	Ninhydrin hydrate [6]
495-48-7	Azoxybenzene [7]
497-38-1	2-Norbornanone [6]
499-80-9	2,4-Pyridinedicarboxylic acid [6]
500-22-1	3-Pyridynealdehyde [6]
501-65-5	1,2-Diphenylacetylene [6]
501-81-5	3-Pyridylacetic acid [7]
504-24-5	4-Aminopyridine [7]
504-29-0	2-Aminopyridine [6,7,8]
504-88-1	3-Nitropropanoic acid [9,10]
512-56-1	Trimethyl phosphate [4]
513-44-0	Isobutyl mercaptan [7]
523-80-8	Apiol [4]
524-42-5	1,2-Naphthoquinone [6,9,10]
526-73-8	1,2,3-Trimethylbenzene [6]
527-20-8	2,3,4,5,6-Pentachloroaniline [8]
530-93-8	2-Tetralone [4]
534-52-1	4,6-Dinitro-2-cresol [5,8]
536-90-3	3-Methoxyaniline [537-91-7] Nitrophenide [7]
544-47-8	2-(4-Chlorobenzyl)-2-thiopseudourea hydrochloride [6,9]
552-94-3	Disalicylic acid [7]
555-77-1	Tris-(2-chloroethyl)amine [4]
563-25-7	Dibutyltin difluoride [6,7,9,10]
571-60-8	1,4-Dihydroxynaphthalene [5,8]
574-45-8	N-(Diphenylmethylene)aniline [6,8]
578-54-1	2-Ethylaniline [7]
585-28-4	<i>n</i> -Butyloxamate [4,6]
586-95-8	4-Pyridylmethanol [6]

Table 3. (cont.)**CAS Reg. No. NAME**

586-98-1	2-Pyridylmethanol [6]
587-02-0	3-Ethylaniline [7]
588-46-5	N-Benzylacetamide [6]
589-16-2	4-Ethylaniline [7]
591-08-2	N-Acetylthiourea [4,6,7]
591-27-5	3-Hydroxyaniline [7]
592-88-1	Allyl sulfide [5]
595-90-4	Tetraphenyltin [7]
597-64-8	Tetraethyltin [8]
599-61-1	Bis(3-aminophenyl)sulfone [7]
602-09-5	Di-beta-naphthol [6]
603-32-7	Triphenyl arsenic [7]
603-33-8	Triphenyl bismuth [7]
607-05-6	1-Ethylisatin 3-thiosemicarbazone [4]
610-43-5	Ethyl N-benzylcarbanilate [4]
612-24-8	2-Nitrobenzonitrile [7]
614-22-2	1-Benzoylurea [7]
615-11-2	Furfuryl furoate [4]
618-68-8	Dibenzylacetic acid [4,7]
619-65-8	4-Cyanobenzoic acid [6,7]
623-03-0	4-Chlorobenzonitrile [6]
623-39-2	3-Methoxy-1,2-propanediol [4]
625-92-3	3,5-Dibromopyridine [7]
626-58-4	4-Methylpiperidine [7]
626-60-8	3-Chloropyridine [6]
626-64-2	4-Hydroxypyridine [6]
626-67-5	1-Methylpiperidine [7]
628-97-7	Ethyl hexadecanoate [6]
629-50-5	Tridecane [4]
630-08-0	Carbon monoxide [5]
632-22-4	Tetramethylurea [7]
635-22-3	4-Chloro-3-nitroaniline [6]
636-47-5	Distamycin A [6]
636-97-5	4-Nitrobenzohydrazide [6]
638-65-3	Octadecanenitrile [7]
640-19-7	Fluoroacetamide [8]
661-69-8	Hexamethylditin [4,5,6,7,8]
670-38-2	2,4-Dichloro-3,5-xylyl N-methylcarbamate [4]
671-04-5	Carbanolate [9]
672-06-0	2,4-Dichloro-5-ethyl- <i>m</i> -cresol N-methylcarbamate [4,6]
673-00-7	4-Chloro-3,5-xylyl N-methylcarbamate [4]
673-68-7	Methylglyoxal bis [(N ⁴ -methyl)thiosemicarbazone] [4]
683-18-1	Dibutyltin dichloride [9]
693-98-1	2-Methylimidazole [7]
694-59-7	Pyridine 1-oxide [7]
695-34-1	2-Amino-4-picoline [7]
702-03-4	N-(2-Cyanoethyl)cyclohexylamine [4]
706-07-0	4-Chloro-beta-nitrostyrene [4,6,7]
728-40-5	2,6-Bis(1,1-dimethylethyl)-4-nitrophenol [7]
731-27-1	Tolyl fluanid [4]
786-19-6	Carbofenthion [7,9,10]
790-90-9	Fenchlorethate [4]

Table 3. (cont.)**CAS Reg. No. NAME**

814-67-5	1,2-Dimercaptopropane [7]
814-91-5	Copper oxalate [6,7,9]
818-08-6	Dibutyltin oxide [8]
872-85-5	4-Pyridinealdehyde [6]
873-32-5	2-Chlorobenzonitrile [6]
873-74-5	4-Aminobenzonitrile [7]
874-84-0	1-(2-Thienyl)-2-nitroethene [4,6]
874-90-8	4-Methoxy benzonitrile [6]
877-95-2	<i>N</i> -Phenethylacetamide [6,7]
886-80-6	O,O-Dimethyl O-(2-(fluoromethyl)-6-methyl-4-pyrimidinyl) phosphorothioic acid [4,9]
900-95-8	Triphenyltin acetate [4,6,7,9,10]
919-44-8	Monocrotophos [4,9,10]
920-37-6	2-Chloroacrylonitrile [7]
922-86-1	O,O-Dimethyl S-(2-(methylamino)-1-(methylamino)carbonyl)-2-oxoethyl-phosphorodithioate [7,9,10]
930-87-0	1,2,5-Trimethylpyrrole [5]
931-19-1	2-Methylpyridine <i>N</i> -oxide [6]
934-32-7	2-Aminobenzimidazole [5]
944-22-9	Dyonate [6,7,9,10]
945-51-7	Diphenyl sulfoxide [7]
947-02-4	Phosfolan [7,9,10]
947-42-2	Dihydroxydiphenylsilane [8]
950-37-8	Methidathion [5]
953-17-3	Methyl trithion [6,7,9,10]
956-90-1	Phencyclidine hydrochloride [4]
991-42-4	Norbornide [6]
996-08-7	Dibutyltin dibromide [8]
998-40-3	Tributylphosphine [4]
999-81-5	Chlormequat [6]
1003-67-4	4-Picoline 1-oxide [7]
1003-73-2	3-Picoline 1-oxide [7]
1007-22-3	3,5-Bis(dimethylamino)-1,2,4-dithiazolium chloride [4]
1007-36-9	1-Methyl-3-phenylurea [8]
1008-65-7	Fenadiazole [4]
1054-59-7	Bis(diphenylphosphine) oxide [5]
1067-33-0	Dibutyltin diacetate [6,7,9,10]
1072-97-5	2-Amino-5-bromopyridine [6,7]
1074-06-2	2-Azabicyclo(4.4.0)dec-1-ene [4]
1113-02-6	Dimethoxon [9]
1115-06-6	Tetramethyl thioperoxydicarbonic diamide [4,7,9]
1118-61-2	3-Aminocrotononitrile [6]
1121-14-8	3-Nitroisoazoline [8]
1121-60-4	2-Pyridine carboxaldehyde [4,6]
1122-54-9	4-Acetylpyridine [6]
1122-58-3	4-(Dimethylamino)pyridine [8]
1122-62-9	2-Acetylpyridine [6]
1124-06-7	4-Chloro-2,5-dimethylphenol [4]
1129-41-5	3-Tolyl <i>N</i> -methylcarbamate [4]
1135-99-5	Diphenyltin dichloride [9]
1139-30-6	Caryophyllene oxide [5]
1153-06-6	Triphenyllead chloride [6,7]
1156-52-1	O-Ethyl O-[2-(fluoromethyl)-4-methyl-6-pyrimidinyl]phenylphosphonothioate [4]

Table 3. (cont.)**CAS Reg. No. NAME**

1193-54-0	Dichloromaleimide [8]
1305-62-0	Calcium hydroxide [4]
1314-62-1	Vanadium pentoxide [5,8]
1314-84-7	Zinc phosphide [4,6,7,8]
1332-40-7	Copper oxychloride [5]
1421-49-4	3,5-Di- <i>tert</i> -butyl-4-hydroxybenzoic acid [6]
1461-22-9	Tributyltin chloride [4,6,7,9]
1461-25-2	Tetrabutyltin [6,7]
1491-41-4	Naftalophos [6,7]
1528-07-0	Tribromobutyltin [8]
1529-41-5	3-Chlorobenzyl cyanide [6]
1530-88-7	1-Cyanopyrrolidine [5]
1563-66-2	Carbofuran [4,5,8]
1569-69-3	Cyclohexyl mercaptan [7]
1609-86-5	<i>tert</i> -Butyl isocyanate [6,7]
1708-41-4	Furfurylidene ethylene acetal [4]
1716-09-2	Ethyl fenthion [7,9]
1728-97-8	2-(4-Dimethylaminophenyl)-4,5-diphenylimidazole [6,7]
1740-24-5	2-(1-Naphthyl)-4,5-diphenylimidazole [6,7]
1754-58-1	Diamidafos [8,10]
1783-81-9	3-(Methylthio)aniline [7]
1804-58-6	O,O-Diethyl O-[(3-propylthio)-4-nitrophenyl]phosphorothioate [4,9,10]
1837-62-3	Ethyl <i>tert</i> -octylcarbamate [4]
1885-29-6	2-Aminobenzonitrile [7]
1910-43-5	Paraquat dichloride [5]
1910-68-5	N-Methylisatin thiosemicarbazone [6]
1929-77-7	Vernolate [6]
1948-92-1	4-(Nitrophenylsulfonyl)aniline [4]
1965-19-1	2-(2-Methoxyphenyl)-4,5-diphenylimidazole [6,7]
1970-15-6	O,O-Diethyl O-(3-ethylthio-4-nitrophenyl)phosphorothioate [4]
1983-10-4	Tributyltin fluoride [8,9]
1990-90-5	4-Amino-3-methylpyridine [4]
2032-59-9	Aminocarb [4,7]
2032-65-7	Methiocarb [4,6,9,10]
2050-49-9	2,4-Dibromonaphthol [6]
2050-66-0	Bis(4-chloro-2-nitrophenyl) disulfide [7]
2095-17-2	Desdimethylchloropromazine [4]
2096-66-4	Methyl 2-chloro-3-hydroxy-3-(dimethoxyphosphinyl)butanoate [6]
2097-19-0	1-Phenylsilarane [5,8]
2104-64-5	EPN [6]
2155-70-6	Tributyltin methacrylate [8]
2157-47-3	Fenchone oxime [6]
2167-53-5	Bis (4-chlorophenyl)carbonate [4]
2210-52-8	O,O-Diethyl O-[5-chloro-2-(diethylaminomethyl)-4-nitrophenyl]phosphorothioate [4]
2214-34-8	O-Methyl O-(2,4,5-trichlorophenyl)amidophosphate [4]
2224-44-4	4-(2-Nitrobutyl) morpholine [6]
2237-30-1	3-Aminobenzonitrile [7]
2273-43-0	Butylstannoic acid [8]
2275-61-8	Bis(1-aziridinyl)- <i>N</i> -methylphosphinic amide [4]
2293-07-4	4-Methoxyphenyl thiourea [7,8]
2302-88-7	1-Acetyl-3-thiosemicarbazide [6]
2322-38-5	Tetrachloro-4-hydroxypyridine [4,7]

Table 3. (cont.)**CAS Reg. No. NAME**

2364-54-7	Nitrosothymol [6]
2385-85-5	Mirex [4,6,7,8,9]
2390-59-2	Ethyl violet [6,7,9,10]
2396-68-1	4- <i>tert</i> -Butylbenzenethiol [6,7]
2417-90-5	3-Bromopropanenitrile [6]
2425-06-1	Captafol [6,7,9,10]
2439-01-2	Quinomethionate [6,7,9,10]
2439-10-3	Dodine [7,9,10]
2444-96-4	S-Ethyl dibutylthiocarbamate [6,7]
2445-07-0	Urbacid [6]
2456-28-2	Didecyl ether [6]
2456-81-7	4-Pyrrolidinopyridine [5]
2457-76-3	4-Amino-2-chlorobanzoic acid [4,7]
2458-12-0	3-Amino-4-methyl benzoic acid [4]
2492-26-4	Sodium mercaptobenzothiazole [7]
2524-09-6	Triethyl phosphorodithioate [4]
2587-94-2	Dimephen-S-sulfone [9]
2589-65-3	4-Chloro-3-tolyl N-methylcarbamate [4]
2592-62-3	6,7,8,9,10,10-Hexachloro-1,5,5a,6,9,9a-hexahydro-3-methyl-6,9-methano-2,4-benzodioxepin [7,9,10]
2595-54-2	Mecarbam [6,7,9]
2597-03-7	Dimephenthioate [7,9]
2621-80-9	Ethyl 4-chlorocarbanilate [7]
2622-26-6	Properciazine [4]
2636-23-9	O-Ethyl O-(4-ethylsulfinyl)phenyl methylphosphonothioate [9,10]
2636-25-1	O-(3-Methyl-4-(methylthio)phenyl) dimethylphosphinothioate [6]
2636-26-2	Cyanophos [7,9,10]
2638-94-0	4,4'-Azobis(4-cyanovaleric acid) [6]
2667-49-4	O-Methyl O-(2,4-dichlorophenyl) methylphosphonothioate [7,9,10]
2668-92-0	O,O-Diethyl O-naphthalimido phosphorothioate [7,9,10]
2686-99-9	Trimethacarb [4,6,9]
2703-13-1	O-Ethyl O-(4-(methylthio)phenyl)methylphosphonothioate [6,10]
2703-61-9	3-((Dimethoxyphosphinyl)oxy)-2-butenoic acid, phenylmethyl ester [6,9]
2767-90-0	4-Piperidinopyridine [5]
2769-64-4	Butyl isocyanide [6]
2781-10-4	Dibutyltin di(2-ethylhexanoate) [7,9,10]
2799-95-3	O,O-Diethyl O-[3-(dimethylamino)-4-nitrophenyl]phosphorothioate [4,9,10]
2826-32-6	3-Nitrobenzylidenemalononitrile [7]
2827-47-6	N,N,N,N-Tetramethylmelamine [4]
2830-86-6	Phosphorothioic acid, O,O-dimethyl ester, S-ester with 2-mercato- <i>N,N</i> '-dimethylmalonamide [7,10]
2830-87-7	S-(2-(Ethylamino)1-((ethylamino)carbonyl)-2-oxoethyl) O,O-dimethyl phosphorodithioate [7,9,10]
2835-68-9	4-Aminobenzamide [7]
2864-61-1	O-Ethyl O-(2,4,5-trichlorophenyl) <i>N</i> -ethylamidophosphate [4]
2865-70-5	10-Chlorophenoxyarsine [6,7,9]
2872-96-0	1,2-Dibromo-2,2-dichloroethyl methyl phenyl phosphate [6,7,10]
2896-10-8	Tri-4-tolylarsine [5]
2917-19-3	5-sec-Butyl-2-chlorophenyl methylcarbamate [9]
2939-97-1	5,5-Dimethyl-3-[(1,1,2,2-tetrachloroethyl)thio]hydantoin [4,6,10]
2951-17-9	O,O-Dimethyl O-(3-chloro-4-methylthiophenyl) phosphorothioate [7,9,10]

Table 3. (cont.)**CAS Reg. No. NAME**

2972-76-1	2,4-Dichlorobenzalmalononitrile [6]
2984-64-7	O-Ethyl S-(4-chlorophenyl) ethylphosphonodithioate [6,9,10]
2984-65-8	O-Methyl S-4-tolyl ethylphosphonodithioate [4,6,7,910]
2986-17-6	1,3-Diisopropylthiourea [6]
2987-53-3	2-Methylmercaptoaniline [6,7]
2990-03-6	2,6-Xylylurea [6]
3010-04-6	(Butylamino)acetonitrile [6]
3091-29-0	Trioctyltinbromide [8]
3107-79-9	Trinitrobenzene aniline complex [4,9]
3138-23-6	3,4-Dichlorobenzalmalononitrile [6]
3186-12-7	O-Ethyl O-(4-ethylthio)phenyl methylphosphonothioate [6,9,10]
3186-14-9	O-Methyl O-(4-methylthio)phenyl methylphosphonothioate [6,9,10]
3202-97-9	2,5-Di(3,5-di- <i>tert</i> -butyl-4-hydroxyphenyl)-1,3,4-thiadiazole [4]
3212-18-8	3-Chloropropyl 2,2-dichlorovinyl ethylphosphate [6,7,9,10]
3212-19-9	2-Cholorethyl 2,2-dichlorovinyl methylphosphate [6,7,9]
3222-82-0	N-(1,1,2,2-Tetrachloroethylmercapto)-N-methyl- <i>p</i> -chlorobenzenesulfonamide [6,7,9,10]
3247-32-3	O-Methyl O-[2-(ethylthio)-6-methyl-4-pyrimidinyl] ethylphosphonothioate [6,10]
3254-63-5	Dimethyl-4-(methylthio)phenyl phosphate [10]
3267-78-5	Tripropyltin acetate [9]
3279-46-7	2-(2-Propynyoxy)phenyl methylcarbamate [4]
3304-97-0	<i>tert</i> -Butyl dimethyltrithioperoxy carbamate [6,8,9]
3309-71-5	O-Ethyl O-(4-ethylsulfonyl)phenyl methylphosphonothioate [9,10]
3309-77-1	4-Chlorobenzyl-3-hydroxycrotonate dimethylphosphate [10]
3316-24-3	1(2-Methoxyphenyl)-2-nitroethene [4,6,7]
3383-96-8	Temephos [4]
3385-34-0	Ethyl isodehydroacetate [4,6]
3406-84-6	4,4'-Biphenylenedisulfonyl chloride [6]
3463-22-7	1-Phenoxy silatrane [8]
3489-28-9	1,9-Nonanedithiol [7]
3513-92-6	O,O-Diethyl O-tetrahydrofurfuryl phosphorothiate [6]
3542-36-7	Diocetyl tin dichloride [8]
3544-24-9	3-Aminobenzamide [7]
3567-95-1	N-(4-Chlorophenyl)-2nitro-4-(trifluoromethyl)benzenamine [7,10]
3568-51-2	2-Chloroethyl 2,2-dichlorovinyl ethyl phosphate [6,8,9]
3568-56-7	O-Ethyl O-(4-methylthio-3-tolyl) methylphosphoramidothioate [6,9,10]
3600-12-2	Triphenyllead methyl sulfide [6]
3600-13-3	Triphenyllead propyl sulfide [6]
3686-91-7	2-Chloro-1-methylethyl 2,2-dichlorovinyl ethylphosphate [7,9,10]
3687-13-6	2,4-Dichlorophenyl methanesulfonate [6,9]
3691-35-8	Chlorophacinone [4,6,7]
3692-90-8	3-(2-Propynyoxy)phenyl methylcarbamate [4]
3695-77-0	Triphenylmethyl mercaptan [7]
3696-28-4	Omadine disulfide [4]
3731-51-9	2-Picolylamine [7]
3731-52-0	3-Picolylamine [6]
3731-53-1	4-Picolylamine [6,7]
3732-82-9	Hexamethyl thiophosphoric triamide [4]
3733-84-4	O-Ethyl O-isopropyl O-phthaloxamido phosphorothioate [6]
3734-33-6	Denatonium benzoate [6]
3734-97-2	Amiton oxalate [8,10]
3736-81-0	Dichlofurazol [9]
3760-54-1	1-Formylpyrrolidine [5]

Table 3. (cont.)**CAS Reg. No. NAME**

3761-53-3	Acid Scarlet 2R [6]
3766-55-0	4-Allylthiosemicarbazide [6,7]
3811-73-2	2-Mercaptopyridine N-oxide sodium salt [4]
3846-49-9	1,3-diethyl-1,3-bis(4-nitrophenyl) urea [4]
3911-05-5	Nickel diethyldithiophosphate [9]
4049-62-1	4-Dimethylamino-4'-isopropylamino diphenylamine [6]
4051-59-6	Bis-(4,5-diphenyl-2-imidazolyl)-benzene-1,4- [6]
4052-53-3	Zinc trithiocarbonate [4]
4104-14-7	Gophacide [6,7,8,9]
4156-44-9	O-5-Chloro-1,2-benzisoxazole-3-yl O,O-diethyl phosphorothioate [9,10]
4214-75-9	2-Amino-3-nitropyridine [6]
4229-92-8	2-n-Propylfuran [6,7]
4234-79-1	Pentanoic acid, 4-oxo-, decachlorodecahydrodicyclobuta (cd,gh)pentalen-2-yl ester [7,10]
4253-22-9	Dibutyltin mercaptide [9]
4301-50-2	Fluenethyl [5]
4342-36-3	Tri-n-butylinbenzoate [4,6,7,9,10]
4412-09-3	Mucochloric anhydride [7]
4428-05-1	2,3-Quinoxalinediolo, cyclic S,S-dithiocarbonate [6,9]
4602-84-0	Farnesol [5]
4672-86-0	Methoxypyridoxine hydrochloride [6,7]
4808-30-4	Tributyltin sulfide [9]
4897-50-1	4-Piperidinopiperidine [5]
4932-80-3	N-(Trichloroethylmercapto)-4-cyclohexene-1,2-dicarboximide [6,10]
4979-36-6	4,4'-Bis(dimethylamino) N-methylphenylamine [6]
5000-22-6	2,3,5,6-Tetrachloro-4-pyridinol sodium salt [8]
5034-58-2	N-(((1,1a,3,3a,4,4,5,5a,5b,6-Decachlorooctahydro-1,3,4-metheno-1H-cyclobuta(c,d)pentalen-2-yl)oxy)-carbonyl), ethyl ester [6,7,10]
5035-67-6	Tributyltin 2-ethylhexanoate [6,7,9,10]
5108-96-3	Ammoniumpyrrolidine dithiocarbamate [5]
5219-61-4	Phenylmercaptoacetonitrile [10]
5221-42-1	4-Acetamidopyridine [4]
5252-78-2	2,2,4-Trichloroacetophenone [4]
5273-86-9	cis-Asarone [5]
5299-52-5	Oleyl morpholine [7]
5332-06-9	4-Bromobutylonitrile [7]
5343-83-9	2-Mercapto-4-phenylbenzothiazole [6]
5348-51-6	2-Hydroxy-4-methylpyrimidine hydrochloride [6]
5348-82-3	n-Stearyl chloracetate [6]
5349-78-0	4,8-Dimethyl-2-hydroxyquinoline [6]
5351-51-9	2-Mercapto-4,5-dimethylthiazole [4]
5374-06-1	4,6-Di-tert-butyl resorcinol [6,9]
5377-20-8	Methoxymol [4]
5378-21-2	2-(5-Chloro-2-hydroxyphenyl)-1,3,4-oxadiazole [4]
5382-16-1	4-Hydroxypiperidine [6]
5416-43-3	1,4-Diphenyl-3-anilino-5-phenylimino-1,2,4-triazoline [6]
5459-10-9	Thiodipropionamide [4,9]
5459-93-8	N-Ethyl cyclohexylamine [6]
5490-47-1	Lonchocarpic acid [4]
5539-53-7	Acetyl methanesulfonate [4]
5576-54-5	N-(1,2,2-Trichlorovinylmercapto)-4-cyclohexene-1,2-dicarboximide [6,9,10]
5598-13-0	Methyl chlorpyrifos [6,7,9]
5700-53-8	N-Cyclohexylethylenediamine [4]

Table 3. (cont.)**CAS Reg. No. NAME**

5823-11-0	O-(2-(sec-Butoxymethylthio)ethyl)-O,O-diethylphosphorothioic acid [6]
5823-17-6	O,O-Diethyl S-(4-chlorobenzyl) phosphorodithioate [6]
5823-21-2	O,O-Diethyl O-2-(diethylaminoethyl) phosphorothioate [6]
5823-25-6	O,O-Diethyl O-(ethoxycarbonyl)methyl phosphorothioate [6]
5826-95-9	O,O-Diethyl O-2-(2-pyridyl)ethyl phosphorothioate [6]
5827-58-7	Didodecytin dichloride [6]
5835-95-0	S-(Ethylthio)methyl ethylxanthate [6]
5836-10-2	Chloropropylate [8]
5840-95-9	Ethyl-n-[2-(O,O-dimethylphosphorodithioyl)ethyl]carbamate [9,10]
5847-48-3	Tributyltin hydroxyacetate [6,9]
5847-51-8	Tributyltin formate [6,7,9,10]
5847-52-9	Tributyltin chloroacetate [4,6,7,9,10]
5847-54-1	Dibutyltin dibenzoate [6,9]
5847-55-2	Dibutyltin stearate [6,7,9,10]
5863-72-9	Tributyltin propionate [6,7,9,10]
5902-46-5	O,O-Diethyl phosphorothioate anhydride with N,N-bis(dimethylamidophosphate [6,9]
5902-52-3	Ruelene [9]
5902-78-3	O-Methyl O-(4-methylsulfinyl)phenyl methylphosphonothioate [6,7,9,10]
5903-08-2	2-Chloro-1-methylethyl 2,2-dichlorovinyl methylphosphate [7,9]
5903-13-9	Nippon soda [6,8]
5931-53-3	2-Tolyldiphenylphosphine [5]
6011-14-9	Aminoacetonitrile [6]
6012-92-6	3-(4-chlorophenyl)-5-methylrhodanine [4]
6041-28-7	3-(2-Thienyl)acrylonitrile [4]
6098-18-6	20,22-Diazacholestanol hydrochloride [4]
6164-98-3	Chlorphenamidine [5]
6272-87-3	4,6-Dimethyl-3-nitro-2-oxo-2(H)-pyran-5-carboxylic acid, ethyl ester [4]
6281-24-9	5-Nitrofurfurylbromoacetate [6]
6292-68-8	Thiodipropionhydrazide [6]
6358-64-1	4-Chloro-2,5-dimethoxyaniline [6,9]
6385-58-6	Sodium bithionolate [6]
6392-46-7	Allyxycarb [9,10]
6499-14-5	1-Pyrrolidine carbothioic acid hydrazide [5]
6505-75-5	3'-Chloro-5-nitrosalicylanilide [10]
6575-07-1	6-Chloro-2-nitromenzonitrile [6]
6611-01-4	N,N'-Tetramethylenebis-1-aziridinecarboxamide [4]
6622-91-9	4-Pyridineacetic acid hydrochloride [6]
6626-22-8	4-Amino-4'-bromophenyl sulfone [6,7]
6784-53-8	Bis(1-ethylimino)phosphoxyanilide [4]
6802-93-3	Bipiperidyl mustard [4]
6825-25-8	2-Anilino-5-nitropyridine [6]
6843-20-5	Dichlorobis(pyridine) zinc [6]
6906-65-6	Dihydroasarone [5]
6968-72-5	Mepiroxol [7]
7149-79-3	3'-Chloro-4-acetotoluidide [4,6]
7154-73-6	1-(2-Aminoethyl)pyrrolidine [5]
7205-22-3	O,O-Dimethyl S-[(2-methylthio)-5-methylbenzyl] phosphorothioate [4,9]
7212-44-4	Nerolidol [5]
7361-61-7	Xylazine [6]
7375-15-7	N-(3-(Dimethylamino)propyl)-2-pyrrolidinone [4,6]
7379-35-3	4-Chloropyridine hydrochloride [6]
7393-43-3	Tetraallyl stannane [6]

Table 3. (cont.)**CAS Reg. No. NAME**

7393-66-0	S-(10-Phenoxyarsinyl)phenoxythiolacetic acid [4,6,7,9,10]
7467-51-8	4-Acetamido-4'-nitrophenyl sulfide [6]
7501-79-3	<i>n</i> -Hexylacetamide [6]
7645-25-2	Lead arsenate [5,7,8,10]
7663-77-6	<i>N</i> -(3-Aminopropyl)-2-pyrrolidinone [4,6]
7677-24-9	Trimethylsilylnitrile [5]
7681-49-4	Sodium fluoride [5,7,8]
7682-90-8	O,O-Diethyl 3-bromo-5,7-dimethylpyrazolyl-2-pyrimidinephosphorothioate [6]
7700-17-6	Crotoxyphos [7,9,10]
7745-89-3	Starlicide [4,6,7,9,10]
7758-98-7	Cupric sulfate [5,7]
7778-44-1	Calcium arsenate [9]
7779-27-3	1,3,5-Triethylhexahydro-1,3,5-triazine [6,7]
7784-25-0	Alum ammonium [7]
7785-70-8	<i>alpha</i> -Pinene [5]
8000-96-2	Sodium 2-mercaptopbenzthiazole, mixture with sodium dimethyldithiocarbamate [7]
8001-35-2	Toxaphene [4]
8003-46-1	Dinitrotrichlorobenzene [6,9]
8007-39-4	Pelletierine tannate [4]
8022-00-2	Demeton methyl [7,10]
8023-77-6	Capsicum oleoresin [5,6]
8072-15-9	Crow Chex [5]
9003-13-8	Butoxypolypropylene glycol [6]
10031-59-1	Thallium sulfate [4,6,8,9]
10191-74-9	(1,3-Dithiolan-2-ylidene)urea [7,9,10]
10265-92-6	Methamidophos [4]
10265-93-7	Ethyl methyl phosphoramidothioate [4,6]
10340-91-7	Benzylisonitrile [6,7]
10341-75-0	Acetophenone oxime [6]
12122-67-7	Zineb [6]
12712-85-5	TD-71 (dental material) [6]
12789-03-6	Chlordane [4]
13010-08-7	1-Nitroso-3-nitro-1-butylguanidine [4]
13071-79-9	Counter [5]
13073-50-2	7-Oxa-5-thia-2-aza-6-phosphanonanoic acid, 6-ethoxy-3-oxo-, ethyl ester, 6-sulfide [6]
13085-88-6	Ethylene bis(tetrahydrothiophenonium) dibromide [4,7]
13104-13-7	O-Ethyl O-(2,4-dichlorophenyl) ethylphosphonothioate [6,7,9,10]
13121-70-5	Plictran [7,9,10]
13194-48-4	Ethoprop [5,8]
13431-34-0	4-Ethyl-3-thiosemicarbazide [5,7]
13435-05-7	Tris(tributyltin)phosphate [9]
13463-41-7	Zinc pyrithione [7,9,10]
13464-38-5	Sodium arsenate [6,9]
13574-14-6	<i>N,N,N',N'</i> -Tetramethyl glycinate [4]
13636-33-4	1-(3,4-dichlorophenyl)-3-dimethylguanidine [4,9]
13983-15-8	4-Benzamido-2-methoxy-5-methylbenzene diazonium chloride, zinc double salt [6]
14010-73-2	1,1, <i>N,N</i> -Tetramethyl-2-butynylamine [9]
14013-30-0	2-(Dimethylamino)ethylthiosulfonic acid [4]
14024-88-5	Dibromobipyridyl zinc [6]
14025-05-9	Diiodobipyridyl zinc [6]
14227-95-3	1-Cyanoacetyl pyrrolidine [8]
14302-01-3	Tetrakis(laurylamino)zinc chloride [4,6]

Table 3. (cont.)**CAS Reg. No. NAME**

14458-95-8	5,6,7,8,9,9 ^h Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-dimethanophthalazine 2-oxide [4,6,7,8,10]
14465-96-4	Bis(1-aziridinyl)aminophosphine sulfide [4]
14548-46-0	4-Benzoylpyridine [7]
14548-48-2	4-(4-Chlorobenzoyl)pyridine [7]
14691-35-1	2-(2-Hydroxyphenyl)-4,5-diphenylimidazole [6,7]
14788-97-7	Bis(1,2,2-trichloroethyl)sulfoxide [4]
14816-18-3	Phoxim [7,9,10]
14816-20-7	Chlorphoxim [8]
14915-37-8	Copper omadine [4]
15029-30-8	1-Cyanoacetylpirperazine [6]
15348-65-9	Dianisidinetetrazolium chloride, zinc double salt [4,6]
15590-77-9	Triphenyllead phenyl sulfide [6,7,9]
15739-73-8	Diacetoxybipyridyl zinc [6]
15827-14-2	Dibutyltin dilaurate [7]
15863-66-8	O,O-Dimethyl S-[(5-nitro-1 <i>H</i> -indazol-1-yl)methyl phosphorodithioate [6,10]
15879-93-3	<i>alpha</i> -Chloralose [6]
15940-15-5	O,O-Diethyl, O-(5,7-dimethyl-6-(phenylthio)pyrazolo-(1,5, <i>alpha</i>)pyrimidin-2-yl)-phosphorothioate [4]
15942-48-0	2-Chloro-5- <i>tert</i> -pentylphenyl <i>N</i> -methylcarbamate [4]
16179-97-8	2-Pyridylacetic acid hydrochloride [7]
16340-15-1	N-(Trichloromethyl)dithio)-4-cyclohexene-1,2-dicarboximide [6]
16509-79-8	Ziram cyclohexylamine complex [8]
16532-79-9	4-Bromobenzyl cyanide [6]
16588-02-6	2-Chloro-5-nitrobenzonitrile [6]
16743-23-0	Ethyl nickel phosphorodithioate [10]
16752-77-5	Lannate [7]
17201-43-3	4-Cyanobenzyl bromide [6]
17301-81-4	Brucene <i>N</i> -oxide hydrate [6]
17360-35-9	Oxytremorine fumarate [5,8]
17485-97-1	2,3-Dihydro-1,1-dimethyl-1 <i>H</i> -inden-4-yl methylcarbamate [4]
17576-41-9	Ethyl (4-nitrophenyl)carbamate [4,7]
17586-94-6	Diocetyl tin diacetate [6,9,10]
17623-41-5	Dodecylamine picrate [6,9]
17650-76-9	Dicaphoxon [4,9]
17747-43-2	3-Aceyoxy pyridine [6]
17788-27-1	3'-Hydroxypropionanilide isopropylcarbamate [4]
17804-35-2	Benomyl [7]
17826-27-6	1-(3,4-Dichlorocyclohexyl)-3-phenylguanidine [4,9]
17826-31-2	1-(3,4-Dichlorophenyl)-3-dipropylguanidine [4]
17826-33-4	1-(3,4-Dichlorophenyl)-3-ethylguanidine [4,6,8,9,10]
17826-37-8	1-(4,5-Dichlorophenyl)-3-diethylguanidine [4,6,7]
17826-42-5	2-(3,4-dichlorophenyl)-1,3-dimethylguanidine [4,10]
17826-44-7	1,3-Dipropyl-2-(3,4,5-trichlorophenyl)guanidine [4,6,9]
17826-45-8	1,3-Bis(1-methylethyl)-2-(4,5-dichlorophenyl)guanidine [4,6,7,9]
17826-46-9	2-(4,5-Dichlorophenyl)-1,3-diethyl guanidine [4]
17826-48-1	3-Benzyl-1-(3,4-dichlorophenyl)guanidine [4,6]
18139-33-8	9-(3-Dimethylaminopropyl)-2-trifluoromethylxanthene hydrochloride [4]
18152-09-2	O,O-Diethyl S-(chloro-3-methylphenyl) phosphorodithioate [4,9]
18251-82-6	Diisobutylamine hydrochloride [7]
18300-91-9	Pentadecanenitrile [6]
18722-71-9	<i>N,N,N'</i> -Tetramethyl- <i>P</i> -piperidinophosphonic diamide [4]

Table 3. (cont.)**CAS Reg. No. NAME**

18979-94-7	4-Chloro-2-hexylphenol [6,9]
19213-72-0	1-Carbethoxyimidazole [4]
19645-42-2	O-[3-(Isopropylthio)-4-nitrophenyl O,O-dimethylphosphorothioate [7]
19715-19-6	3,5-Di- <i>tert</i> -butylsalisalicylic acid [7]
20286-12-8	Isobutyrylaziridine [4]
20368-13-2	1-Nonanoylpiperidine [7]
20443-88-3	Tetrahydro-2-(4-methoxyphenoxy)-2H-pyran [5]
20636-60-6	S-Cyanomethylthioacetic acid, methylcarbamoyloxime [5]
20925-85-3	Pentachlorobenzonitrile [8]
21198-18-5	N-Cyclohexylthiosemicarbazide [6,7]
21865-85-0	1-(2-Furyl)-5-methyl-1-hexen-3-one [4]
22482-43-5	1-(2,6-Dichlorophenyl)-2-nitroethene [4,7]
22515-76-0	Ammonium methanesulfonate [4]
22683-22-3	1-(2-Imidazolin-2-ylmethyl)-3-ethylindole hydrochloride [4]
24353-61-5	Isocarbophos [4,6,8]
24815-24-5	Rescinnamine [5,8]
24910-31-4	4-Methyl-2-n-heptadecylimidazole [6,7]
24935-08-8	N-(2-Aminoethyl)-2-pyrrolidinone [4,6]
25013-16-5	Butylated hydroxyanisole [5]
25033-34-5	Bis(1-aziridinyl)anilino phosphine sulfide [4]
25173-72-2	3,4,5-Trimethoxyhydrocinnamic acid [5]
25205-08-7	2-[(Aminoethoxyphosphinothioyl)oxy]-1-methylethylbenzoate [6]
25289-73-0	Methoxymethyl methanesulfonate [4]
25311-71-1	Isofenphos [5]
25537-46-6	Ethyl-, O-Ethyl O-(2-(ethylthio)-6-methyl-4-pyrimidinyl) ester [7,9,10]
25918-54-1	O-Methyl O-(2,4,5-trichlorophenyl)ethylphosphonothioate [4]
26151-76-8	Methyl 2-(1-(2-pyridinyl)ethylidene)-1-carbothioic acid hydrazide [5]
26354-15-4	Tributyltin methacrylate polymer [8]
26820-61-1	5-Nitro-2-piperidinopyridine [6]
26872-84-4	N-Cyclohexyl- <i>beta</i> -alanine [4,6]
27582-61-2	p-Hydroxyphenylisopropylmercaptalglyoxylonitrile O,O-dimethylphosphorothioic acid [5,8]
27641-19-6	<i>alpha,alpha</i> -Sucroseoctaacetate [7]
28188-41-2	3-Cyanobenzyl bromide [6]
28334-86-3	4-Isocyano-4'-(<i>tert</i> -butyl)diphenyl sulfide [4]
28801-69-6	Tributyltin neodecanoate [6,9,10]
29025-67-0	5-p-Chlorophenylsilatrane [4,5,6,8]
29118-87-4	Thiocarboxime [6,7]
29134-29-0	Pyrrolidineacetonitrile [5]
29305-70-2	O-Ethyl O-(2-diethylmethylamino)-4,6-dichlorophenyl ethylphosphonothioate [8]
29798-69-4	2,3-Dimethoxyphenol [8]
30894-16-7	Methylchlorothymol [4,6,7]
31097-63-9	Terephthaloyldiacetate [4]
31535-06-5	2-Ethyl-3-cholotetrahydropyran [5]
31584-10-8	Cuperous <i>tert</i> -dodecylmercaptanide [4]
32575-80-7	O,O-Diethyl 3-chloro-5,7-dimethylpyrazolyl-2-pyrimidinephosphorothioic acid [6]
32575-81-8	<i>o</i> -Tolyl glyoxylonitrile oxime, diethyl phosphate [6]
32646-25-6	N-1-Methylethyl-2-(1-(2-propyl)ethylidene) carbothioamide hydrazide [5]
32812-87-6	Lead beneylmercaptide [6]
33130-04-0	3-(2,3,4-Trimethoxyphenyl)propionic acid [5]
33233-06-6	Amobam T [4,6]
33322-20-2	2-(2-Nitrophenyl)furan [4,7]

Table 3. (cont.)**CAS Reg. No. NAME**

34445-68-6	3,4,5,6,9,9-hexahydro-1a,2,2a,3,6,6a,7,7a-octahydro-2,7-dimethanonaphthal [2,3,6]-thirene [6,7,9,10]
34491-12-8	Bis(diethylthio)chloromethyl phosphonate [7]
34662-31-2	5-Chloro-2-nitrobenzonitrile [6]
34751-42-3	N-(6-Aminohexyl)-2-pyrrolidinone [6]
35400-43-2	O-Ethyl O-(4-(methylthio)phenyl)-S-propyl phosphorodithioate [5]
35452-92-7	Formparanate hydrochloride [4,6,8]
35455-61-9	2,2'-Methylenebis(4,6-di- <i>tert</i> -butylresorcinol) [6,7,9]
35455-62-0	2,2'-Thiobis(4,6-di- <i>tert</i> -butylresorcinol) [6,7,9]
35734-86-2	2-(3- <i>tert</i> -Butyl-2-hydroxy-5-methylphenyl)-1,3,4-oxadiazole [4]
35734-88-4	2-[2-Hydroxy-5(1,1,3,3-tetramethylbutyl)phenyl]-1,3,4-oxadiazole [4]
35734-89-5	2-(2-Hydroxy-5-methoxyphenyl)-1,3,4-oxadiazole [4]
35944-64-0	3-Iodo-4-toluidine [4]
35944-73-1	1,3-Cyclopentanedisulfonyl difluoride [9]
35944-82-2	2,4,5-Trichlorophenyl ethyl phosphoramidic acid [4,6]
35944-83-3	O-(2,4,5-Trichlorophenyl) 1-methylethyl phosphoramidothioic acid [4,6]
35944-86-6	Diethyl 1-(4-chlorophenyl)2-(ethylthio)ethenyl phosphate [6,7,9]
35944-88-8	Carbanocyanimidothioic acid, phenoxy-, anhydrosulfide with O,O-diethylhydrogen phosphorothioate [4]
36155-25-8	2,5-Di(3,5-di- <i>tert</i> -butyl-2-hydroxyphenyl)-1,3,4-thiadiazole [4]
36507-21-8	6-Dimethylaminonicotinamide [5,8,10]
36530-23-1	Ziram cyclohexylamine complex [9]
37194-96-0	S,S-Diisopropyl 2-methoxyvinylphosphonodithioate [6]
37335-68-5	Ethylbenzyl dimethylalkylammonium cyclohexylsulfamate [7]
37345-24-7	5-(<i>N</i> -Piperidino)-10,11-dihydro-5 <i>H</i> -dibenzo(a,d)-cycloheptene [4,6,8]
37942-72-6	1-(4-Cyclohexylmethylcyclohexyl)-3-phenylurea [4]
38667-55-9	2-Methyl-4-animobenzoic acid [6,7]
39283-42-6	Red squill [4]
39387-42-3	Benzalkonium saccharinate [7]
39457-25-5	Bay COE-3675 [4]
41083-11-8	Tricyclotin [5]
41198-08-7	Curacron [5]
41648-40-2	8- <i>tert</i> -Butyl-6-chloro-3-(4-nitrophenyl)-2 <i>H</i> ,1,3-benzoxazine-2,4(3 <i>H</i>)-dione [4]
41648-41-3	6-Chloro-3-(4-nitrophenyl)-2 <i>H</i> ,1,3-benzoxazine-2,4(3 <i>H</i>)-dione [4]
41648-42-4	8-Benzyl-6-chloro-3-(4-nitrophenyl)-2 <i>H</i> ,1,3-benzoxazine-2,4(3 <i>H</i>)-dione [4]
41657-00-5	2,5-Dichloro- <i>N</i> -(2,4-dinitro-1-naphthyl)benzenesulfonamide [4]
42062-39-5	<i>alpha</i> -(Dimethylaminomethyl)-1-methyl-3-indolemethanol [7]
42346-68-9	1-Methyl-4-carboxy-2-pyrrolidone [6]
42398-17-4	Diisophorone hydrazone [6]
43036-06-2	<i>N</i> -(2-Cyanoethyl)pyrrole [6,7]
43133-31-9	<i>N,N,N,N</i> -Tetrakis(diphenylphosphinomethyl)ethylenediamine [5]
49592-61-2	3-Chloro-4-hydroxysulfolane [4]
50708-20-8	3-Hydroxyglutaconic acid, dimethyl ester, dimethyl phosphate [6,7,9,10]
51170-48-0	Ethyl 1-(hydroxymethyl)propylcarbamate [6]
51378-51-9	3-(2-Tetrahydropyranoyloxy)pentyne [5]
51594-83-3	3-Pyridylmethyl- <i>N</i> -4'-nitrophenylcarbamate [4,6,8]
51594-86-6	3-Pyridylmethyl- <i>N</i> -(4-methylthio)phenylcarbamate [4,6,8]
52041-44-8	3-[(1-Oxopropyl)amino]phenyl butyl carbamic acid [4]
52053-86-8	2-(4-Morpholinylmethyl-3-(1-piperidinyl)-1 <i>H</i> -naphtho(2,1 <i>b</i>)pyran-1-one [6,7,9,10]
52243-27-3	3,5-Dichloro-2,4,6-trimethoxybenzonitrile [8]
52399-94-7	4-Methoxy-2,3,5,6-tetrachlorobenzonitrile [8]
52400-00-7	3,4-Dimethoxy-2,5,6-trichlorobenzonitrile [8]

Table 3. (cont.)**CAS Reg. No. NAME**

52725-29-8	Nickelpentachlorophenol [4]
53516-81-7	((3-Amino-2,4,6-trichlorophenyl)methylene)benzenesulfonic acid hydrazide [5,8]
53558-25-1	Pyriminyl [8]
53653-64-8	N-(4-Aminobutyl)-2-pyrrolidinone [4,6]
53710-61-5	N-Acetyl-4-(cyclohexylmethylcyclohexyl)amine [4,8]
54898-73-6	N-Aminomethyl cyclohexanecarbonitrile [6]
55864-37-4	1-(Cyanoamino)benzimidazole [8]
56240-91-6	Triphenyllead carbazole [7]
56240-92-7	Triphenyllead indole [7]
56240-93-8	Triphenyllead pyrrole [7]
57004-87-2	1-(3,4-Dichlorophenyl)-3-(1-methylethyl)guanidine [4,6]
57548-01-3	2,2'-Diacetoxy-3,3',5,5'-tetrachlorodiphenyl sulfide [5,8]
58550-89-3	3-Chloro-4-hydroxy quinoline [5,8]
58728-64-6	4-Amino-1-naphthalene carbonitrile [6]
61104-37-8	Bis(triphenylgermanium) disulfide [6]
61164-09-8	2-Methyl- <i>alpha,alpha</i> -diphenyl-1-pyrrolidinebutyramide [6,9,10]
61444-62-0	Nifluride [5]
61614-71-9	Tetraisopropylthiopyrophosphoric acid [4]
63938-40-9	Ethyl ((3-((dimethoxyphosphinyl)oxy)-1-oxo-2-but enyl)amino)acetate [6,7,9,10]
63981-11-3	O,O-Dimethyl O-(2-chloro-4-cyanophenyl) phosphorothioate [7,10]
63992-58-5	Phenylmethyl 3-((methoxyphenoxyphosphinyl)oxy)-2-butenoate [6,7,9,10]
64011-81-0	Cyclohexylmethyl 3-((dimethoxyphosphinyl)oxy)-2-butenoate [6,7,9,10]
64011-86-5	1-(3-Nitrophenyl)ethyl-3-((dimethoxyphosphinyl)oxy)-, 2-butanoate [6,9,10]
64046-58-8	2-Mercaptoacetanilide carbamate [4,6]
64050-55-1	Dimethyl 1-(4-nitrobenzyloxycarbonyl)-1-propen-2-yl phosphate [6,7,9,10]
64050-67-5	4-Chloro- <i>alpha</i> -methylbenzyl-3-hydroxy crotonic acid, diethyl phosphate [6]
64205-22-7	2,6-Dichloro-4-nitrophenyl-2-butanoic acid [4,9]
65324-06-3	1,4,5,6,7,7-Hexachloro-3-[(2-hydroxy-1-methylethoxy)methyl]bicyclo[2.2.1]heptene-2-ethanol (65% chlorine) [7]
65907-30-4	Promet [5]
66671-82-7	2,5-Diaminoanisole sulfate [5]
67625-87-0	4-Methyl-2-azaspiro(5.5)undec-1-ene [4]
67625-95-0	3-Methyl-3-nonyl-3,4,5,6-tetrahydropyridine [4]
67626-33-9	2-Azaspiro[5.5]undec-7-enyl pentamethyleneurea [5]
67626-36-2	2-Azaspiro[5.5]undec-7-enyl tetramethylene urea [5]
67626-59-9	N-2'-Hydroxyethyl-2-azaspiro(5.5)undec-7-ene [4]
67626-65-7	2-Azaspiro[5.5]undec-7-enyl carboethoxymethyl urea [5]
67626-66-8	2,6-Dimethylpiperidyl- <i>n</i> -butylurea [5]
67680-56-2	N-(2-Iodoethyl)trifluoroacetamide [4]
68864-04-0	Polytriphenyltin methacrylate [6,7,9,10]
69462-14-2	Endolan-U [4]
70618-31-4	N-(4-Methoxyphenyl)-2-(1-(2-pyridinyl)ethylidene)hydrazide [5]
71555-14-1	N,N-Dimethyl-2-(1-(2-pyridinyl)ethylidene)carbothioamide hydrazide [5]
71555-15-2	N,N-Dipropyl-2-(1-(2-pyridinyl)ethylidene)carbothioamide hydrazide [5]
71555-21-0	N-Benzyl-N-methyl-2-(1-(2-propyl)ethylidene)carbothioamide hydrazide [5]
71555-25-4	(1-(2-Pyridinyl)ethylidene)-1-azetidinecarbothioic acid hydrazide [5]
71555-26-5	2-(1-(2-Pyridinyl)ethylidene)-1-pyrrolidinecarbothioic acid hydrazide [5]
71555-30-1	(1-(2-Pyridinyl)ethylidene)-2,6-dimethyl-1-piperidinecarbothioic acid hydrazide [5]
71555-31-2	(1-(2-Pyridinyl)ethylidene)-3,5-dimethyl-1-piperidinecarbothioic acid hydrazide [5]
71555-32-3	(1-(2-Pyridinyl)ethylidene)-2-ethyl-1-piperidinecarbothioic acid hydrazide [5]
71555-39-0	(1-(2-Pyridinyl)ethylidene)-1-morpholinecarbothioic acid hydrazide [5]

Table 3. (cont.)**CAS Reg. No. NAME**

71555-41-4	(1-(2-(Pyridinyl)ethylidene)hexahydro-1 <i>H</i> -azepinecarbothioic acid hydrazide [5]
71555-60-7	(1-(2-(Pyridinyl)ethylidene)-2-methyl-1-piperidinecarbothioic acid hydrazide [5]
71555-61-8	(1-(2-(Pyridinyl)ethylidene)-4-methyl-1-piperidinecarbothioic acid hydrazide [5]
71712-03-3	2,4-Bis(1,1-dimethylethyl)-6-((methoxyphenyl)methyl)phenol [5]
71712-08-8	5-Ethoxy-6-((4-methoxyphenyl)methyl)-1,3-benzodioxole [5]
73618-59-4	4-Nitro-2-(1,1,2,2,-tetrafluoroethyl)-6-(trifluoromethyl)-1 <i>H</i> -benzimidazole [5]
74664-33-8	4-Chloro-2-nitrobenzenediazonium chloride zinc double salt [5,8]
74685-15-7	2,5-Dichlorobenzene diazonium chloride zinc double salt [5,8]
74764-61-7	<i>N</i> -1-(3-Thiouridopropyl)-2-pyrrolidinone [4,6]
74764-65-1	4-Amino-3,5-diido- <i>alpha</i> -4-methoxyphenyl hydrocinnamic acid [4,6]
74764-66-2	4-Pyridineglyoxylonitrile [4]
74767-62-8	5-(<i>N</i> -Piperidino)-10,11-dihydro-5 <i>H</i> -dibenzo(<i>a,d</i>)cycloheptene [4]
74893-07-5	Oleyl carbamate [4]
74987-87-4	Di(2-ethylbutyl)acetylene dicarboxylate [4]
76154-77-3	<i>N</i> -Hexyl- <i>N'</i> -phenyl-4-phenylenediamine [6]
78154-05-9	<i>N,N</i> -(2-Methylallyl)- <i>N'</i> -propylurea [4]
79802-60-1	3-(2-Tetrahydropyranoyloxy)pentene [5]
81603-62-5	2-(2,3-Dimethoxyphenoxy)tetrahydropyran [5]
81603-63-6	3-(2-Tetrahydropyranoyloxy)pentane [5]
81603-64-7	3-(2-Aminobutyl)-6-fluoroindole hydrochloride [4]
82679-86-5	Tetrakis(<i>n</i> -hexylamino)boronium chloride [4]
82679-87-6	<i>sym</i> -(3-Oleylamino)propylthiourea [4]
82679-88-7	9-(4-Dimethylaminophenyl)-10-phenylacridinium thiocyanate [4,6,7,9,10]
82679-90-1	O,O-Dimethyl S-[<i>(N,N</i> -diallylcarbamoyl)methyl phosphorothioic acid [4,9]
82679-91-2	O-Ethyl O-[(4-methylsulfinyl)-3-tolyl]phenylphosphonothioate [4]
82679-92-3	O,O-Dimethyl S-[1-(ethoxycarbonyl)-2-(ethylthio)ethyl]phosphorodithioate [4]
82980-43-6	O-Methyl O-3-tolyl methylphosphonothioate [4,9]
82980-44-7	O-Methyl O-[(3-methyl)-4-(methylsulfinyl)phenyl]-1-methylethylphosphonothioate [4,9]
82980-46-9	O-Benzisoxazole <i>N,N,N,N</i> -tetramethylphosphorodiamide [4,7,9]
83270-42-2	<i>N,N</i> -Di- <i>n</i> -butyl <i>tert</i> -octylsulfonamide [4]
83270-44-4	O-(6-Amino-2-ethylthio-4-pyrimidinyl) O,O-diethylphosphorothioate [4]
83476-78-2	2-(1-(2-Pyridinyl)ethyl)-1-pyrrolidine carbothioic acid hydrazide [5]
84473-92-7	6-Methoxy-2 <i>H</i> ,1,3-benzoxazine-2,4(3 <i>H</i>)-dione [4]
84473-93-8	8-Benzyl-6-chloro-2 <i>H</i> ,1,3-benzoxazine-2,4(3 <i>H</i>)-dione [4]
84473-94-9	8- <i>tert</i> -Butyl-6-chloro-3-phenyl-2 <i>H</i> ,1,3-benzoxazine-2,4(3 <i>H</i>)-dione [4]
84473-96-1	4-Amino-3,5-dichlorosalicylic acid [4]
84473-97-2	2,5-Di(2-hydroxy-5-(methylthio)phenyl)-1,3,4-thiadiazole [4]
84473-98-3	6-Methoxy-3-phenyl-2 <i>H</i> ,1,3-benzoxazine-2,4(3 <i>H</i>)-dione [4]
84473-99-4	2-Benzyl-4-chlorophenyl methyl carbamate [4]
84474-00-0	<i>N</i> -(3-Chloro-4-tolyl)-4-methylbenzylamine [4]
84474-01-1	<i>alpha</i> -(3-Chloro-4-toluidino)-2-cresol [4]
84474-03-3	<i>N</i> -(3-Chloro-4-tolyl)picrylamine [4]
84474-04-4	<i>N</i> - <i>alpha</i> -(3-Chloro-4-tolyl)- <i>N</i> ⁴ , <i>N</i> ⁴ -dimethyl <i>alpha</i> -4-toluenediamine [4]
84474-05-5	<i>N</i> -(3-Chloro-4-tolyl)-2,3-dimethoxybenzylamine [4]
84474-06-6	1,3-Dimethyl-3-phenyl-3,4,5,6-tetrahydropyridinium iodide [4]
84474-07-7	5-Cyclohexyl-3-propyl-tetrahydro-1,3,5,4 <i>H</i> -oxadiazin-4-one [4]
84501-73-5	<i>N</i> -(3-Chloro-4-toluidinomethyl)phthalimide [4]
85748-39-6	2-(1-(2-Pyridinyl)propylidene)-1-pyrrolidine carbothioic acid hydrazide [5]
85748-45-4	2-(1-(2-Isoquinolyl)ethylidene)-1-pyrrolidine carbothioic acid hydrazide [5]
85748-46-5	2-(1-Phenylethylidene)-1-pyrrolidine carbothococc and hydrazide [5]
85748-52-3	<i>N</i> -Ethyl-2-(1-(2-pyridyl)ethylidene) carboxamide hydrazide [5]
85748-55-6	2-(1-(2-Pyridyl)ethylidene)-1-pyrrolidine carbothococc acid hydrazide [5]

Table 3. (cont.)

CAS Reg. No. NAME

85748-57-8	2-(1-(2-Pyrrolyl)ethylidene)-1-pyrrolidine carbothcocc acid hydrazide [5]
86749-15-7	1-Cyclohexyl-4,6-(5 <i>H</i>)-pyrimidinedithione [6,7,9]

Table 4. The acute oral repellency, oral and dermal toxicity, and subacute toxicity tests conducted on wild and domestic birds.

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	ALD (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LDad (mg/kg)	Route	Species
54-95-5	5595	yes						1000 ♂	oral	cotq	750 ♀	oral	cotq			
55-37-8	275	yes						6.3	derm	rwbb	>10	derm	star			
55-38-9	632	yes						11 >10 5.0 2.6 7.1 9.5 13 2.4 1.8	oral oral oral oral oral oral oral derm derm	mpar vwea wwdo rwbb star star star hspa rbqu	>22 3.0 9.5 30 40 42 45 54 >54 >95	derm derm derm derm derm derm derm ^{foot} derm ^{foot} derm ^{foot} derm ^{foot}	mpar rwbb star star star star star star star star			
56-38-2	1150	yes						1.8	derm	rwbb	1.8	derm	star			
57-24-9	3894	yes						6.0	oral	rwbb	<5.0	oral	star			
58-08-2	630	yes	0.40	rwbb				316	oral	star						
58-36-6	88	yes			42	oral	cotq									
58-89-9	165	yes	1.0	cgra												
60-41-3	4007	yes						5.6	oral	hfin						
62-73-7	1328	yes						>100 32	derm ^{foot} derm ^{foot}	star rwbb	5.6	derm	star			
63-25-2	1330	yes	0.74 0.24	rwbb star				>1000	oral	star						
64-73-3	1805	new	>1.0	rwbb												
64-86-8	5589	yes						100 ♀	oral	cotq						
65-30-5	4221	yes	0.56	cpig				43	oral	star						

Table 4 (cont.).

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	ALD (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LDad (mg/kg)	Route	Species
66-25-1	3589	yes	>1.0	rwbb												
67-64-1	4026	new			>800	oral	hfin									
71-27-2	1346	new						>100	oral	star						
72-00-4	2279	new						5.6 5.6 1.0	derm derm oral	rwbb star rwbb	42 75 0.32	derm ^{foot} derm ^{foot} oral	rwbb star star			
72-20-8	599	yes			5.0	oral	rnph	>3.8 4.0 56	derm derm derm ^{foot}	mpar rwbb star	5.6 3.2 >1.0	derm ^{foot} derm oral	rwbb star rwbb			
77-26-9	4263	yes						18	oral	cgra						
78-34-2	4935	yes						>316 >316 >316	derm oral derm	rwbb star star						
80-00-2	1344	yes	>1.0	rwbb												
80-08-0	1952	yes												>96	oral	rwbb
83-52-3	3821	new	>1.0	rwbb				>100	oral	rwbb	>100	oral	star			
83-62-5	2877	yes						13	oral	cotq						
85-91-6	741	yes	1.9	rwbb												
86-50-0	1828	yes						>1000	oral	rwbb	>316	derm	star			
87-10-5	4193	new			320	oral	cotq									
93-75-4	271	yes						>100	oral	rwbb	>100	oral	star			
94-24-6	631	yes						100 80	oral oral	hfin cpig	228 >69	oral oral	star star			

Table 4 (cont.).

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	ALD (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LDad (mg/kg)	Route	Species
95-51-2	3816	yes						316	oral	hspa						
95-74-9	1347	yes						32 42 4.6 24 25 56	derm derm derm derm derm ^{foot} derm ^{foot}	budg rbqu rwbb tcbb star rwbb	75 4.2 8.0 0.78 4.2 8.0	derm derm derm oral derm derm	mald rwbb rwbb star tcbb star			
95-81-8	2629	new	>1.0	rwbb				>1000	oral	star	1000	oral	rwbb			
96-48-0	5833	yes						>100	oral	rwbb						
99-76-3	1506	yes												>102	oral	rwbb
100-01-6	2680	yes						100	oral	hspa						
102-96-5	604	yes	0.87	rwbb												
104-94-9	2854	yes						750	oral	hspa						
106-47-8	933	yes	>1.0	rwbb				100	oral	rwbb						
106-51-4	3593	yes	>1.0	rwbb												
108-44-1	2683	yes						316	oral	hspa						
114-26-1	735	yes			60	oral	cgoo	100	derm	hspa						
115-29-7	959	yes						24 18	oral derm	rwbb star	18	derm	rwbb			
115-90-2	15	yes	>1.0	rwbb	2.4	oral	cotq	3.2 0.42	derm derm	star rbqu	0.32 1.0	derm derm	rwbb hspa			
118-75-2	737	yes	>1.0	rwbb												
119-38-0	733	yes						>5.0	derm	star						

Table 4 (cont.).

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	ALD (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LDad (mg/kg)	Route	Species
122-14-5	1243	yes						19 >32	derm oral	star hspa	>316	oral	star			
133-06-2	748	yes	>1.0	rwbb	62	oral	cotq									
134-19-0	2652	new	0.68	rwbb				>100	oral	rwbb	>100	oral	star			
137-05-3	3346	yes						>100	derm	star						
137-26-8	156	yes	>1.0	valq												
141-66-2	142	yes			4.0 3.0	oral oral	hspa stgr	<1000	oral	hspa						
152-16-9	798	yes			62	oral	cotq									
297-78-9	145	yes			62	oral	cotq									
297-99-4	1319	yes						1.8	derm	rwbb	5.6	derm	star			
298-04-4	1144	yes						13 1.0	derm derm	star rwbb	133 >39	oral oral	star star			
299-84-3	582	yes						>100	oral	hspa	>100	oral	star			
315-18-4	101	yes			2.0 4.5 16	oral oral oral	cgo0 cotq hspa									
316-42-7	6240	new	>1.0	rwbb				>100	oral	rwbb	>100	oral	star			
329-89-5	867	new			94	oral	cotq									
333-41-5	1141	yes	0.49	rwbb												
359-83-1	3871	yes						>32	oral	mald						
405-41-4	3547	new	>1.0	rwbb										>106	oral	rwbb

Table 4 (cont.).

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	ALD (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LDad (mg/kg)	Route	Species
438-41-5	1803	yes						>32	oral	mald						
452-77-7	2673	yes						>32	derm	star						
462-08-8	1332	yes						>100	oral	star	92	oral	rwbb			
470-90-6	399	yes	1.6	rwbb												
512-56-1	5584	yes						750 ♂	oral	cotq						
523-80-8	6435	yes						>316	oral	star						
530-93-8	2887	new	>1.0	rwbb										>105	oral	rwbb
555-77-1	5586	yes						100 ♂	oral	cotq						
585-28-4	3040	yes												>96	oral	rwbb
591-08-2	2857	yes			1070	oral	cotq									
607-05-6	3870	new	0.22	rwbb				>100	oral	rwbb	>100	oral	star			
610-43-5	2820	new	>1.0	rwbb				>100	oral	rwbb	>100	oral	star			
615-11-2	2805	new	>1.0	rwbb										>98	oral	rwbb
618-68-8	2855	new	>1.0	rwbb										>96	oral	rwbb
623-39-2	5556	new	>1.0	rwbb				>100	oral	rwbb						
629-50-5	3590	yes	>1.0	rwbb												
661-69-8	2186	yes			3.7	oral	cotq	1.3	oral	rwbb						
670-38-2	3322	new	0.56	rwbb				>100	oral	rwbb	>100	oral	star			

Table 4 (cont.).

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	ALD (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LDad (mg/kg)	Route	Species
672-06-0	3321	yes			42	oral	cotq									
673-00-7	3342	new	>1.0	rwbb				>100	oral	rwbb	>100	oral	star			
673-68-7	3811	new	>1.0	rwbb				>100	oral	rwbb	>100	oral	star			
702-03-4	2699	new	1.0	rwbb										>98	oral	rwbb
706-07-0	5866	new	>1.0	rwbb				>100	oral	rwbb						
731-27-1	5532	new	>1.0	rwbb				>100 >100	oral oral	bhcb cgra	>100 >100	oral oral	hspa rwbb			
790-90-9	3837	new	>1.0	rwbb				>100	oral	rwbb	>100	oral	star			
874-84-0	5868	new	0.83	rwbb				>100	oral	rwbb						
886-80-6	2215	new	0.75	rwbb										>77	oral	rwbb
900-95-8	877	yes						133 ♀	oral	cotq						
919-44-8	2538	new	0.056	rwbb	4.0	oral	cotq	18	derm	hspa	4.2	derm	rbqu			
956-90-1	3525	yes	<0.18	hspa				75	oral	cotq						
998-40-3	2691	yes						>100	oral	rwbb						
1007-22-3	6184	new						24 ♂	oral	cotq						
1008-65-7	4289	new	>1.0	rwbb				>100	oral	rwbb						
1074-06-2	6404	new	>1.0	rwbb				>100	oral	rwbb						
1115-06-6	1974	new	>1.0	rwbb										>100	oral	rwbb
1121-60-4	4457	new						>1000 750	oral oral	star cotq	100	oral	rwbb			

Table 4 (cont.).

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	ALD (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LDad (mg/kg)	Route	Species
1124-06-7	3334	new	>1.0	rwbb										>110	oral	rwbb
1129-41-5	3341	new	>1.0	rwbb										>105	oral	rwbb
1156-52-1	2318	new	>1.0	rwbb				100	oral	star	56	oral	rwbb			
1305-62-0	3573	yes	>0.32	hspa												
1314-84-7	3745	yes			62	oral	cotq									
1461-22-9	506	yes	0.65 0.24	rwbb hspa												
1563-66-2	4917	yes						3.2 100 5.0	oral derm oral	cotq hspa cpig	0.56 100	oral derm	rbqu rbqu			
1708-41-4	2807	new	>1.0	rwbb										>98	oral	rwbb
1804-58-6	2535	new	0.24	rwbb										42	oral	rwbb
1837-62-3	2670	new	>1.0	rwbb				>100	oral	rwbb	>100	oral	star			
1948-92-1	1176	new	0.80	rwbb				>75	oral	rwbb						
1970-15-6	2343	new	>1.0	rwbb				5.6	oral	rwbb	>100	oral	star			
1990-90-5	3813	yes						4.2 10	oral oral	btgr wwdo	5.6	oral	mdov			
2032-59-9	1326	yes	0.20	rwbb				>316 220	derm oral	rwbb star	>316	derm	star			
2032-65-7	736	yes						>100 18 32 3.2	derm oral oral imus	hspa rnph rnph rwbb	100 24 24 7.5	derm oral oral oral	rbqu cotq rnph arob			
2095-17-2	3824	new	>1.0	rwbb				>100	oral	rwbb	>100	oral	star			

Table 4 (cont.).

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	ALD (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LDad (mg/kg)	Route	Species
2167-53-5	978	new	>1.0	rwbb										>104	oral	rwbb
2210-52-8	2302	new	>1.0	rwbb										>96	oral	rwbb
2214-34-8	3362	new	0.68	rwbb				>100	oral	rwbb	>100	oral	star			
2275-61-8	6176	yes	0.75	rwbb				237 ♀ 24	oral oral	cotq star	4.2 7.5	oral oral	rwbb star			
2322-38-5	5534	new	>1.0	rwbb				>100	oral	rwbb						
2385-85-5	727	yes			>900	oral	rwbb									
2457-76-3	6389	yes						>1000	oral	cotq						
2458-12-0	2658	new	>1.0	rwbb				>100	oral	rwbb	>100	oral	star			
2524-09-6	1839	new	>0.10	rwbb												
2589-65-3	3344	new	>1.0	rwbb				>100	oral	rwbb	>100	oral	star			
2622-26-6	3389	yes						>10 >10	oral oral	bhcb mdov	>10 >10	oral oral	cgra yhbb			
2686-99-9	3527	yes	0.12 0.014 0.15 0.26 0.022 0.27 <1.0 0.56 >1.0 0.38	rwbb cpig hspa rwbb bhcb rnph yhbb cgra cgra star				28 56 42 27 31 24 13 >316 >1000	oral oral oral oral oral oral oral oral	cotq bbmp cgra cotq cpig hspa rnph star star	562 18 20 <56 21 562 24	oral oral oral oral oral oral oral	star bhcb cgra cpig rwbb star yhbb			
2799-95-3	2533	new	<1.0	rwbb				4.2	oral	rwbb	100	oral	star			
2827-47-6	6182	new	>1.0	rwbb				>316	oral	cotq						

Table 4 (cont).

Table 4 (cont).

Table 4 (cont).

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	ALD (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LDad (mg/kg)	Route	Species
7205-22-3	2229	yes	0.15	rwbb										>42	oral	rwbb
7375-15-7	5974	new	>1.0	rwbb												
7393-66-0	105	new	0.45 0.060 0.21	rwbb rwbb hspa				>100 >100	oral	hspa star						
7663-77-6	5971	new	>1.0	rwbb												
7745-89-3	1339	yes						42 33 <1.0 1.3	derm ^{foot} derm oral oral	rbqu rbqu btgr star						
8001-35-2	3818	yes						>7.0	oral	star						
8007-39-4	5561	new	>0.32	rwbb				>100	oral	rwbb						
10031-59-1	3290	new			18	oral	cotq									
10265-92-6	5620	new	0.24	rwbb				1.8 32	oral derm	rwbb rwbb						
10265-93-7	4182	new			12	oral	cotq									
12789-03-6	4015	new						>100	oral	rwbb						
13010-08-7	6368	new	>1.0	rwbb				>100	oral	cotq						
13085-88-6	2824	new	>1.0	rwbb												
13574-14-6	6340	new						>316	oral	cotq						
13636-33-4	2902	new	0.60	rwbb										73	oral	rwbb
14013-30-0	6346	new	>1.0	rwbb				>316	oral	cotq						

Table 4 (cont.).

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	ALD (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LDad (mg/kg)	Route	Species
14302-01-3	1503	new	>1.0	rwbb												
14458-95-8	547	yes			28	oral	cotq									
14465-96-4	6190	new	>1.0	rwbb				100 ♀	oral	cotq	10	oral	rwbb			
14788-97-7	1836	yes						100	oral	rwbb	>100	oral	star			
14915-37-8	3565	new	0.18	rwbb												
15348-65-9	462	new	0.30	rwbb												
15940-15-5	3514	new	0.075 <1.0	rwbb rwbb				5.6	oral	rwbb	56	oral	star			
15942-48-0	1826	yes			62	oral	cotq							<61	oral	rwbb
17485-97-1	4240	new	>1.0	rwbb												
17576-41-9	2669	new	0.32	rwbb				>100	oral	star	75	oral	rwbb			
17650-76-9	2913	new	0.023	rwbb				3.2	oral	rwbb	5.6	oral	star			
17788-27-1	4219	new	0.56	rwbb				>100	oral	rwbb	>100	oral	star			
17826-27-6	3173	new	0.42	rwbb				>100	oral	rwbb	>100	oral	star			
17826-31-2	3546	new	>1.0	rwbb										>91	oral	rwbb
17826-33-4	3542	new	>1.0	rwbb										>91	oral	rwbb
17826-37-8	3278	new	>1.0	rwbb										>106	oral	rwbb
17826-42-5	2386	new	0.80	rwbb										>84	oral	rwbb
17826-44-7	3667	new	>1.0	rwbb										>93	oral	rwbb
17826-45-8	3597	new	>1.0	rwbb										>90	oral	rwbb

Table 4 (cont).

Table 4 (cont.).

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	ALD (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LDad (mg/kg)	Route	Species
29025-67-0	3970	new			1.6 18	oral oral	cotq cotq	>32 1.0	derm oral	hspa rwbb	2.4	oral	hspa			
30894-16-7	5180	new			1600	oral	cotq									
31097-63-9	2689	new	>1.0	rwbb										>96	oral	rwbb
31584-10-8	3891	new	>1.0	rwbb												
33233-06-6	2109	new	0.75	rwbb												
33322-20-2	5362	new	>1.0	rwbb				>100	oral	rwbb						
35452-92-7	4112	new			1.0	oral	cotq									
35734-86-2	5512	new	>1.0	rwbb												
35734-88-4	4286	new	>1.0	rwbb				100	oral	rwbb						
35734-89-5	5508	new	>1.0	rwbb												
35944-64-0	1322	yes	0.70	rwbb												
35944-82-2	2865	yes			140	oral	cotq									
35944-83-3	2866	yes			140	oral	cotq									
35944-88-8	3803	new	0.080 <0.10	rwbb rwbb				3.2	oral	rwbb	3.2	oral	hspa			
36155-25-8	5509	new	>1.0	rwbb												
37345-24-7	5976	new	>1.0	rwbb				>500 >500 >500	oral oral oral	bwqu cpig hspa	>100 >500	oral oral	rwbb star			
37942-72-6	5592	new	>1.0	rwbb				>100	oral	rwbb						

Table 4 (cont.).

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	ALD (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LDad (mg/kg)	Route	Species
39283-42-6	6102	new	>1.0	rwbb												
39457-25-5	5528	yes						2.4	oral	star						
41648-40-2	4284	new	>1.0	rwbb				>100	oral	rwbb						
41648-41-3	4280	new	>1.0	rwbb				>100	oral	rwbb						
41648-42-4	4282	new	>1.0	rwbb				>100	oral	rwbb						
41657-00-5	6183	new						>316 ♂	oral	cotq						
49592-61-2	3888	new	>1.0	rwbb												
51594-83-3	6027	new						>500 >500 >500	oral oral oral	bhcb bwqu hspa	>500 >500	oral oral	rwbb star			
51594-86-6	6092	new						178 90	oral oral	bhcb bwqu	90 >500	oral oral	cotq star			
52041-44-8	4218	new	>1.0	rwbb				>100	oral	rwbb	>100	oral	star			
52725-29-8	1835	new	>0.10	rwbb				>100	oral	star	>100	oral	rwbb			
53653-64-8	5972	new	>1.0	rwbb												
53710-61-5	5593	new	>1.0	rwbb				>100	oral	rwbb						
57004-87-2	3666	new	>1.0	rwbb										>102	oral	rwbb
61614-71-9	1820	new	0.22	rwbb										<103	oral	rwbb
64046-58-8	2819	yes	0.68	rwbb				>100	oral	rwbb	>100	oral	star			
64205-22-7	2981	new	0.80	rwbb				5.6	oral	rwbb	42	oral	star			
67625-87-0	6402	new	0.67	rwbb				>100	oral	rwbb						

Table 4 (cont.).

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	ALD (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LDad (mg/kg)	Route	Species
67625-95-0	6403	new	>1.0	rwbb				>100	oral	rwbb						
67626-59-9	6392	new	>1.0	rwbb				>100	oral	rwbb						
67680-56-2	6451	new	>1.0	rwbb				>316 >316	oral oral	cotq rwbb	>316	oral	star			
69462-14-2	5539	new	>1.0	rwbb				32	oral	rwbb						
74764-61-7	5975	new	>1.0	rwbb												
74764-65-1	6064	new	>1.0	rwbb				>100	oral	rwbb						
74764-66-2	6114	new	>1.0	rwbb				>100	oral	rwbb						
74767-62-8	5576	new	0.82	rwbb				>100	oral	rwbb						
74893-07-5	2681	new	>1.0	rwbb				>100	oral	rwbb	>100	oral	star			
74987-87-4	2721	new	>1.0	rwbb										>96	oral	rwbb
78154-05-9	6393	new	>1.0	rwbb				>100	oral	rwbb						
81603-64-7	3326	new	0.80	rwbb										>86	oral	rwbb
82679-86-5	1494	new	>1.0	rwbb										>96	oral	rwbb
82679-87-6	1192	new	>1.0	rwbb										>98	oral	rwbb
82679-88-7	1535	new	0.32	rwbb										>71	oral	rwbb
82679-90-1	2220	new	0.42	rwbb												
82679-91-2	2301	new	0.32	rwbb												
82679-92-3	2316	new	>1.0	rwbb				>100	oral	rwbb	>100	oral	star			
82980-43-6	2530	new	>1.0	rwbb										>77	oral	rwbb

Table 4 (cont.).

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	ALD (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LDad (mg/kg)	Route	Species
82980-44-7	2531	new	0.056	rwbb				2.4	oral	rwbb	24	oral	star			
82980-46-9	2534	new	0.14	rwbb	62	oral	cotq							36	oral	rwbb
83270-42-2	3567	new	>1.8	rwbb												
83270-44-4	3800	new	0.75	rwbb				2.4	oral	rwbb	18	oral	star			
84473-92-7	4287	new	>1.0	rwbb				>100	oral	rwbb						
84473-93-8	4283	new	>1.0	rwbb				>100	oral	rwbb						
84473-94-9	4281	new	>1.0	rwbb				>100	oral	rwbb						
84473-96-1	6063	new	>1.0	rwbb				>100	oral	rwbb						
84473-97-2	5506	new	>1.0	rwbb												
84473-98-3	4290	new	>1.0	rwbb				>100	oral	rwbb						
84473-99-4	4288	new	>1.0	rwbb				>100	oral	rwbb						
84474-00-0	6447	new	>1.0	rwbb				18 75	oral oral	cotq rwbb	42	oral	star			
84474-01-1	6445	new	>1.0	rwbb				75 237	oral oral	cotq rwbb	>316	oral	star			
84474-03-3	6443	new	>1.0	rwbb				>316 >316	oral oral	cotq rwbb	>316	oral	star			
84474-04-4	6442	new	>1.0	rwbb				2.4 2.4	oral oral	cotq rwbb	5.6	oral	star			
84474-05-5	6441	new	>1.0	rwbb				>316 >316	oral oral	cotq rwbb	>316	oral	star			
84474-06-6	6405	new	0.65	rwbb				>100	oral	rwbb						

Table 4 (cont.).

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	ALD (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	LDad (mg/kg)	Route	Species
84474-07-7	6395	new	>1.0	rwbb				>100	oral	rwbb						
84501-73-5	6446	new	>1.0	rwbb				32 237	oral oral	cotq rwbb	>316	oral	star			

Table 5. Acute oral repellency, toxicity and subacute toxicity tests conducted on wild and domestic birds listed in this publication.

Table 5. (cont.)

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	ALD (mg/kg)	Species
128-53-0	-	new			92	oral	cotq					
141-82-2	-	new			1873	oral	cotq					
289-95-2	6748	new	>1.0	rwbb	100 ♂	oral	rwbb	133	oral	star		
299-42-3	6644	yes	0.12 0.056 0.43	cpig rwbb star	>1000	oral	star					
300-62-9	3541	new	>1.0	rwbb							84	rwbb
301-12-2	4050	new			18 42	oral derm	rwbb rwbb	178 133	oral derm	star star		
317-34-0	6750	new	>1.0	rwbb	>316 ♂	oral	rwbb	>316	oral	star		
329-89-5	867	yes			32 >56	oral oral	mald rnph	1.9 <18	oral oral	rwbb rwbb	13	rwbb
534-52-1	4911	yes			14	oral	cotq					
571-60-8	-	new			133	oral	cotq					
592-88-1	6759	new	>1.0	rwbb								
630-08-0	6665	yes			2103	inhl	cotq					
661-69-8	2186	yes			3.2 ♂ 3.7	oral oral	rwbb cotq	<10 <10	oral oral	mald rnph		
930-87-0	6738	new	>1.0	rwbb	>100 ♂	oral	rwbb	>100	oral	star		
934-32-7	1107	new	0.83	rwbb	87 ♂	oral	rwbb	>316	oral	star		
950-37-8	4034	new	0.13	rwbb	7.5 ♂ 18 ♂	oral derm	rwbb rwbb	18 100	oral derm	star star		
1054-59-7	6763	new	>1.0	rwbb								
1139-30-6	6696	new	>1.0	rwbb	>316 ♂	oral	rwbb	>316	oral	star		
1314-62-1	2978	new			77 >100	oral oral	rwbb mald	>100 178 ♂	oral oral	rnph rwbb	42	cotq

Table 5. (cont.)

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	ALD (mg/kg)	Species
1332-40-7	6687	new	1.8 0.32 0.22 >1.0 >1.0	cgra cpig cpig hspa rwbb	>100 ♂ >100	oral oral	rwbb star	272	oral	star		
1530-88-7	6741	new	>1.0	rwbb	24 ♂	oral	rwbb	65	oral	star		
1563-66-2	4917	yes			2.6	oral	cotq					
1910-43-5	4937	yes			127	oral	cotq					
2097-19-0	3798	new									42	cotq
2456-81-7	6737	new			>100 ♂	oral	rwbb	>100	oral	star		
2767-90-0	6739	new	0.83	rwbb	133 ♂	oral	rwbb					
2896-10-8	6764	new	>1.0	rwbb								
3760-54-1	6740	new	>1.0	rwbb	>316 ♂	oral	rwbb	>316	oral	star		
4301-50-2	5313	new			<10	oral	rwbb					
4602-84-0	6698	new			>316 ♂	oral	rwbb	>316	oral	star		
4897-50-1	6736	new	>1.0	rwbb	>100 ♂	oral	rwbb	>100	oral	star		
5108-96-3	6742	new	>1.0	rwbb	>316 ♂	oral	rwbb	>316	oral	star		
5273-86-9	6631	new	0.24	rwbb	750 ♂	oral	rwbb					
5931-53-3	6766	new	>1.0	rwbb								
6164-98-3	6692	new	>1.0	rwbb	>316 ♂ 154 ♂	oral derm	rwbb rwbb	>316 >316	oral derm	star star		
6499-14-5	6686	new	0.83	rwbb	56 ♂	oral	rwbb	56	oral	star		
6906-65-6	6657	new	>1.0	rwbb	>100	oral	rwbb					
7154-73-6	6743	new	>1.0	rwbb	>316 ♂	oral	rwbb	>316	oral	star		
7212-44-4	6704	new	>1.0	rwbb	>316 ♂	oral	rwbb	>316	oral	star		

Table 5. (cont.)

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	ALD (mg/kg)	Species
7645-25-2	3794	new			931	oral	cotq					
7677-24-9	6675	new	>1.0	rwbb	24 ♂	oral	rwbb	133	oral	star		
7681-49-4	965	yes			142	oral	cotq					
7758-98-7	-	new			187	oral	cotq					
7785-70-8	6702	new	>1.0	rwbb	>316 ♂	oral	rwbb	>316	oral	star		
8023-77-6	6695	new	>1.0	rwbb	>316 ♂	oral	rwbb	>316	oral	star		
8072-15-9	6663	new	>1.0	rwbb	>100	oral	rwbb					
13071-79-9	6688	new	0.44	rwbb	0.56	oral	rwbb	5.6	oral	star		
13194-48-4	4948	yes			8.0	oral	cotq					
17360-35-9	4166	new			<18	oral	tcbb					
20443-88-3	6474	new	>1.0	rwbb	>562 ♂	oral	rwbb					
20636-60-6	4271	new	0.56	rwbb	3.2	oral	rwbb					
24815-24-5	-	new			>1000	oral	cotq					
25013-16-5	6757	new	>1.0	rwbb	>316 ♂	oral	rwbb	>316	oral	star		
25173-72-2	6628	new	>1.0	rwbb	422 ♂	oral	rwbb					
25311-71-1	6689	new	0.024	rwbb	1.0 ♂ 2.4 ♂	oral derm	rwbb rwbb	13 18	oral derm	star star		
26151-76-8	6708	new	0.13	rwbb	>316 ♂	oral	rwbb	>316	oral	star		
27582-61-2	4186	new									28	cotq
29025-67-0	3970	yes			1.1 1.8 3.2	oral oral oral	star rwbb rwbb	8.4 ♂ >10	oral oral	rnph mald		
29134-29-0	6746	new	>1.0	rwbb	49 ♂	oral	rwbb	100	oral	star		
31535-06-5	6633	new	>1.0	rwbb	>1000 ♂	oral	rwbb					

Table 5. (cont.)

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	ALD (mg/kg)	Species
32646-25-6	6677	new	>1.0	rwbb	42	oral	rwbb	>100	oral	star		
33130-04-0	6627	new	>1.0	rwbb	>1000 ♂	oral	rwbb					
35400-43-2	6694	new			18 ♂ 21 ♂	oral derm	rwbb rwbb	>316 13	oral derm	star star		
36507-21-8	2474	new			56 75 >100	oral oral oral	mald mald rnph	360 564 830	oral oral oral	rwbb cotq rwbb	435 470 490	rwbb cotq cotq
41083-11-8	6611	new	>1.0	rwbb	237 ♂	oral	rwbb	>316	oral	star		
41198-08-7	6691	new	0.082	rwbb	1.8 ♂ 6.5 ♂	oral derm	rwbb rwbb	7.5 178	oral derm	star star		
43133-31-9	6767	new	>1.0	rwbb								
51378-51-9	6478	new	>1.0	rwbb	>562 ♂	oral	rwbb					
53516-81-7	4575	new			<50 100	oral oral	rnph rwbb	>100 >100	oral oral	mald rwbb		
57548-01-3	749	new	>1.0	rwbb							>104	rwbb
58550-89-3	606	new	0.68	rwbb								
61444-62-0	6673	new	0.56 0.56 0.39	cgra hspa rwbb	18 4.9 12 5.6	oral oral oral oral	bbmp cgra hspa mdov	1.3 ♂ 2.1 ♂ 8.7 10	oral oral oral oral	rwbb rwbb star star		
65907-30-4	6705	new	0.12	rwbb	1.8 ♂	oral	rwbb	32	oral	star		
66671-82-7	6615	new	0.65	rwbb	316 422	oral oral	cotq hspa	237 ♂ 237	oral oral	rwbb star		
67626-33-9	6399	new	>1.0	rwbb	>100 ♂	oral	rwbb					
67626-36-2	6401	new	0.91	rwbb	>100 ♂	oral	rwbb					
67626-65-7	6400	new	>1.0	rwbb	>100 ♂	oral	rwbb					
67626-66-8	6397	new	>1.0	rwbb	>100 ♂	oral	rwbb					

Table 5. (cont.)

Table 5. (cont.)

CAS Reg. No.	DRC No.	Add. Data	R50 (%)	Species	LD50 (mg/kg)	Route	Species	LD50 (mg/kg)	Route	Species	ALD (mg/kg)	Species
74685-15-7	463	new	0.13 0.65	rwbb rwbb								
79802-60-1	6477	new	>1.0	rwbb	>316 ♂	oral	rwbb					
81603-62-5	6475	new	>1.0	rwbb	>316 ♂	oral	rwbb					
81603-63-6	6476	new	>1.0	rwbb	>562 ♂	oral	rwbb					
83476-78-2	6660	new	0.43	rwbb	18 ♂	oral	rwbb					
85748-39-6	6681	new	>1.0	rwbb	75 ♂	oral	rwbb	>100	oral	star		
85748-45-4	6684	new	>1.0	rwbb	>100 ♂	oral	rwbb	>100	oral	star		
85748-46-5	6682	new	>1.0	rwbb	>100 ♂	oral	rwbb	>100	oral	star		
85748-52-3	6680	new	>1.0	rwbb	42 ♂	oral	rwbb	>100	oral	star		
85748-55-6	6685	new	0.83	rwbb	>100 ♂	oral	rwbb	>100	oral	star		
85748-57-8	6683	new	>1.0	rwbb	>100 ♂	oral	rwbb	>100	oral	star		

Table 6. Results of acute toxicity, subacute toxicity and repellency tests conducted on wild and domestic mammals with chemicals listed in this publication.

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRdf (%)	Species	R50 (%)	Species	REP (%)	Species
50-78-2	4244	new					>1250	pero	0	pero						
51-17-2	5856	new			>470	pero	>1250	pero	0	pero						
52-60-8	241	new					991	pero	21	pero						
52-66-4	5998	yes	<100	pero												
55-37-8	275	yes	375	dshe	1500	hmus										
56-35-9	874	yes											0.11	hmus		
56-36-0	875	yes											0.11	hmus		
56-92-8	6014	new					>1247	pero	0	pero						
57-24-9	3894	new	42 12 12 12 8.0 12 5.5 8.0 5.5 3.7	nutr nrat rrat npg npg pero pero erat btjr krat	38 32 27 22 14 5.8 6.8 5.9 4.4	cags crat nutr mmou nrat nrat mvol rata btjr										
57-71-6	3035	new													0	hmus
57-95-4	5921	new					>1250	pero	0	pero						
58-36-6	88	yes			>94 <25	nrat pero										
59-66-5	6067	new					>963	pero	23	pero						
60-10-6	5715	new					>125	pero	10	pero						
60-41-3	4007	yes			12	pero	<113	pero	91	pero	38	pero				

Table 6. (Cont.)

Table 6. (Cont.)

Table 6. (Cont.)

Table 6. (Cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRdf (%)	Species	R50 (%)	Species	REP (%)	Species
109-09-1	4411	yes			237 133	hmus nrat										
109-57-9	4481	yes			>470	drab										
110-20-3	3039	yes													70	hmus
110-54-3	4067	new			4692	nrat										
110-86-1	3479	yes			1000 1000	hmus nrat										
111-36-4	5158	yes					>1150 >1125	pero pero	92 90	pero pero						
111-61-5	5843	new			>470	pero	>1238	pero	1	pero						
111-86-4	973	yes			>470	pero	>1075	pero	14	pero						
111-92-2	5848	new			386	pero	>1250	pero	0	pero						
112-20-9	5852	new			480	pero	>813	pero	35	pero						
115-69-5	1460	yes													40	hmus
115-90-2	15	yes	18	pero												
116-66-5	5261	new					>1238	pero	1	pero						
117-78-2	2873	yes			>1600	pero										
120-72-9	3398	yes			>470	pero	>675	pero	46	pero						
120-75-2	5849	new			>470	pero	>1200	pero	4	pero						
121-75-5	1149	yes	470	pero												
122-10-1	127	new					>100	pero	92	pero						
122-88-3	982	yes					>1238	pero	1	pero					0	hmus
123-46-6	5160	new					>1250	pero	0	pero						
123-69-3	5265	yes			>1600	pero	>575	pero	54	pero						

Table 6. (Cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRdf (%)	Species	R50 (%)	Species	REP (%)	Species
124-06-1	5844	new			>470	pero	>1163	pero	7	pero						
126-81-8	3029	new					>1172	pero	7	pero					100	hmus
128-08-5	5893	new					>900	pero	28	pero						
130-15-4	1129	yes													100	hmus
132-64-9	3028	new					>1225	pero	2	pero					50	hmus
133-07-3	511	yes					>1225	pero	1	pero					30	hmus
136-77-6	3021	yes					>550	pero	56	pero						
137-26-8	156	yes			1189	nrat										
140-56-7	9	yes					>375 >175	pero wchi	86 70	wchi pero						
142-08-5	4440	yes			>1000 1000	nrat hmus										
150-76-5	3033	new													20	hmus
152-16-9	798	yes					<19	pero	2	pero						
297-78-9	145	yes	15	npg0												
298-04-4	1144	yes			2.94 ^{dermal} 2.40	btjr btjr										
303-21-9	3024	yes													90	hmus
321-14-2	2636	yes					>1013	pero	81	pero						
329-89-5	867	yes	18	erat	32 >20 18	coyo pero nutr	<300	pero	76	pero	75	pero				
333-43-7	1011	yes	42	pero			>38	pero	97	pero						
350-03-8	4377	new					>573	pero	59	pero						
404-86-4	6076	new			>480	pero	>288	pero	77	pero						

Table 6. (Cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRdf (%)	Species	R50 (%)	Species	REP (%)	Species
464-31-1	5858	new			>470	pero	>1250	pero	0	pero						
470-90-6	399	yes					>444	pero	64	pero						
485-47-2	5898	new					>825	pero	34	pero						
497-38-1	6002	new					>1243	pero	1	pero						
499-80-9	4461	new					>1238	pero	1	pero						
500-22-1	4458	yes			>1000 >1000	hmus nrat										
501-65-5	5842	new			>470	pero	>1238	pero	1	pero						
504-29-0	4394	yes			237 133	nrat hmust										
524-42-5	1130	yes	250	nrat												
526-73-8	5840	new			>470	pero	>1188	pero	5	pero						
544-47-8	4490	yes			>470	drab										
563-25-7	2130	yes					>75	pero	94	pero						
574-45-8	3020	yes					>1238	pero	1	pero						
585-28-4	3040	new													0	hmus
586-95-8	4471	new			>1000 >1000	hmus nrat										
586-98-1	4469	yes			422 422	hmus nrat										
588-46-5	5903	new			>470	pero	>1063	pero	15	pero						
591-08-2	2857	yes	470	pero												
602-09-5	3025	yes													20	hmus
619-65-8	5165	new					>1150	pero	8	pero						
623-03-0	1481	yes					>1050	pero	16	pero						

Table 6. (Cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRdf (%)	Species	R50 (%)	Species	REP (%)	Species
626-60-8	4412	yes			750 422	hmus nrat										
626-64-2	4442	yes			>1000 >1000	hmus nrat										
628-97-7	5860	new			>470	pero	>1250	pero	0	pero						
635-22-3	2650	yes	1600	pero												
636-47-5	2685	yes	42	pero												
636-97-5	3036	new													40	hmus
661-69-8	2186	new			12 8.0 3.7	rrat nrat erat	<150	pero	88	pero					90	hmus
672-06-0	3321	yes			>210	nrat										
706-07-0	5866	yes			385	pero	>150	pero	88	pero						
814-91-5	3568	new			>1600	pero	>550	pero	56	pero						
872-85-5	4459	yes			>1000 1000	hmus nrat										
873-32-5	5226	new					>1138	pero	9	pero						
874-84-0	5868	yes			211	pero	>50 >25	pero pero	98 96	pero pero						
874-90-8	5230	new					>1238	pero	1	pero						
877-95-2	5857	new			956	pero	>1250	pero	0	pero						
900-95-8	877	yes											0.21	hmus		
931-19-1	5594	new			>1000 >1000	hmus nrat										
944-22-9	1878	yes					>25	pero	98	pero						
953-17-3	1228	yes					>1163	pero	7	pero						

Table 6. (Cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRdf (%)	Species	R50 (%)	Species	REP (%)	Species
991-42-4	3901	yes			>1600 18	pero nrat										
999-81-5	659	new					>1250	pero	0	pero						
1067-33-0	1971	yes											0.06	hmus		
1072-97-5	4379	new					>1000	pero	20	pero						
1118-61-2	5228	new					>1225	pero	2	pero						
1121-60-4	4457	yes			422 316	hmus nrat										
1122-54-9	4378	yes			>1000 >1000	hmus nrat										
1122-62-9	4376	yes			>1000 >1000	hmus nrat										
1153-06-6	1689	yes											0.05	hmus		
1314-84-7	3745	yes	94 49 23 42 42 28 8.0 18 18 8.0	nrat cags cags erat rrat npg npg btjr nutr krat	56 18 16 8.3 5.5	nrat mvol mmou btjr nutr	>1025 >1000	pero pero	82 80	pero pero	74 26	pero pero				
1421-49-4	4580	new					>1238	pero	1	pero						
1461-22-9	506	yes											0.12	hmus	100	hmus
1461-25-2	1968	yes											0.24	hmus		
1491-41-4	204	new					414	pero	66	pero						
1529-41-5	5174	new					>775	pero	38	pero						
1609-86-5	5169	new					>1225	pero	2	pero						

Table 6. (Cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRdf (%)	Species	R50 (%)	Species	REP (%)	Species
1728-97-8	1986	new													70	hmus
1740-24-5	1989	new													30	hmus
1910-68-5	5897	new					>1188	pero	5	pero						
1929-77-7	1225	new					>1188	pero	5	pero						
1965-19-1	1985	new													80	hmus
2032-65-7	736	yes					>411 >212	hmus mvol	41 34	mvol hmus			0.12	hmus		
2050-49-9	3026	new													40	hmus
2096-66-4	437	new					>850	pero	32	pero						
2104-64-5	3792	yes	62	pero												
2157-47-3	3041	new					>250	pero	80	pero						
2224-44-4	5861	new					>563	pero	55	pero						
2302-88-7	5914	new					>1200	pero	4	pero						
2364-54-7	3030	yes													30	hmus
2385-85-5	727	yes			>900	nngo										
2390-59-2	1422	yes	140	drab												
2396-68-1	4331	new					>1063	pero	15	pero						
2417-90-5	5184	new					>1225	pero	2	pero						
2425-06-1	3016	yes			>1600 >470	pero drab	>627 >550	pero pero	56 50	pero pero	13	pero				
2439-01-2	240	new	1070	pero			>263	pero	79	pero	0	pero				
2444-96-4	1227	new					>1225	pero	2	pero						
2445-07-0	227	new					763	pero	39	pero						
2456-28-2	5845	new			>470	pero	>1200	pero	4	pero						

Table 6. (Cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRdf (%)	Species	R50 (%)	Species	REP (%)	Species
2595-54-2	65	new					>138	pero	89	pero						
2636-25-1	246	new					<80	pero	94	pero						
2638-94-0	5240	new					>1087 >875	pero pero	30 13	pero pero						
2686-99-9	3527	yes			336 84	pero hmus	>250	pero	80	pero	>1	pero	>1.0 0.35 0.26	hmus hmus hmus		
2703-13-1	20	yes	1.0	npg0												
2703-61-9	415	yes	94	pero			>525	pero	58	pero						
2769-64-4	5257	new					>538 >500	pero pero	60 57	pero pero						
2865-70-5	103	yes			>94	nrat	>100	pero	92	pero						
2872-96-0	566	new					>250	pero	80	pero						
2939-97-1	1976	yes											0.60	hmus		
2972-76-1	912	new					>312	pero	75	pero					100	hmus
2984-64-7	39	new					<50	pero	96	pero						
2984-65-8	2300	yes			>470	drab										
2986-17-6	4498	yes	710	pero	812	pero										
2987-53-3	1951	yes											0.50	hmus		
2990-03-6	4520	new					>1213	pero	3	pero						
3010-04-6	5171	new					>1250	pero	0	pero						
3138-23-6	910	new					>1163	pero	7	pero					100	hmus
3186-12-7	22	yes	5.0	npg0												
3186-14-9	21	yes	1.0	npg0			<75	pero	96	pero						
3212-18-8	11	yes	62	pero			38	pero	97	pero						

Table 6. (Cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRdf (%)	Species	R50 (%)	Species	REP (%)	Species
3212-19-9	10	yes					>1125 >538	pero gmgs	90 57	pero gmgs						
3222-82-0	1980	new			>710	pero	>1125	pero	90	pero	0	pero	0.13	hmus	90	hmus
3247-32-3	270	new					>216	pero	83	pero						
3304-97-0	3777	yes	470	drab												
3316-24-3	5375	yes			1057	pero	>25	pero	98	pero						
3385-34-0	6024	yes					>1250	pero	0	pero						
3406-84-6	4527	new					>1250	pero	0	pero						
3513-92-6	214	yes					>588	pero	53	pero						
3568-51-2	2	yes	100	npg0												
3568-56-7	29	yes	1.0	npg0			>125	pero	90	pero						
3600-12-2	1691	yes	210	pero			>175	pero	86	pero			0.06	hmus		
3600-13-3	1681	yes											0.08	hmus		
3687-13-6	3762	yes			>470	drab	>550	pero	56	pero	0	pero				
3691-35-8	3776	yes			>5.5 3.8	pero vbat	<738	pero	100	pero						
3731-52-0	4385	yes			>1000 >1000	hmus nrat										
3731-53-1	4386	yes			>1000 >1000	hmus nrat										
3733-81-4	216	new					>788	pero	37	pero						
3734-33-6	6081	yes									2	pero				
3761-53-3	2750	new					>1175	pero	6	pero						
3766-55-0	5894	new					>388	pero	69	pero						
4049-62-1	2141	new												100	hmus	

Table 6. (Cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRdf (%)	Species	R50 (%)	Species	REP (%)	Species
4051-59-6	1988	new													10	hmus
4104-14-7	714	yes	63 62 28 18 12 8.0 8.0 7.9 5.4 3.7	vbat cags rrat npgo nutr krat nrat nrat nrat btjr	45 12 5.9 3.6 2.9	cags erat mmou mvol btjr										
4214-75-9	4388	new					>1250	pero	0	pero						
4229-92-8	5836	new			472	pero	>1050	pero	16	pero						
4342-36-3	1969	yes	1070	nrat									0.03	hmus		
4428-05-1	273	new	1600 1500	pero pero	>470	drab	>368 >150	pero pero	88 71	pero pero	43	pero				
4672-86-0	5684	new	60	pero												
4932-80-3	1979	new			>1600	pero	>1050	pero	16	pero			1.0	hmus	60	hmus
4979-36-6	2142	new													90	hmus
5035-67-6	1964	yes											0.10	hmus		
5343-83-9	1118	new					>1250	pero	0	pero					30	hmus
5348-51-6	4436	new					>1238	pero	1	pero						
5348-82-3	981	new					>1088	pero	13	pero					30	hmus
5349-78-0	1151	new													0	hmus
5374-06-1	5029	yes	470	drab												
5382-16-1	4439	new			>1000 >1000	hmus nrat	>1250	pero	0	pero						
5416-43-3	1115	new					>1063	pero	15	pero					40	hmus

Table 6. (Cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRdf (%)	Species	R50 (%)	Species	REP (%)	Species
5459-93-8	5907	new			>470	pero	>1250	pero	0	pero						
5576-54-5	1983	new			>1600	pero	>938	pero	25	pero	13	pero			60	hmus
5598-13-0	790	new	210	pero			>238	pero	81	pero	7	pero				
5823-11-0	4	yes					>63	pero	95	pero						
5823-17-6	218	yes					>438	pero	65	pero						
5823-21-2	215	yes					>1194	pero	5	pero						
5823-25-6	217	yes					>1143	pero	9	pero						
5826-95-9	211	yes					>938	pero	25	pero						
5827-58-7	2196	new													90	hmus
5835-95-0	210	yes					>350	pero	72	pero						
5847-48-3	1967	yes											0.03	hmus		
5847-51-8	1970	new	210	pero			>88	pero	93	pero			0.04	hmus	90	hmus
5847-52-9	1965	new	1070	pero			>25	pero	98	pero			0.13	hmus		
5847-54-1	2123	yes	470	pero			>113	pero	91	pero	17	pero				
5847-55-2	2030	yes	210	drab			>1113	pero	19	pero						
5863-72-9	1966	yes											0.04	hmus		
5902-46-5	7	yes					<25 <13	pero pero	99 98	pero pero						
5902-78-3	23	new	0.5	nngo			<50	pero	96	pero						
5903-13-9	5834	new			15	pero	<91	pero	93	pero						
6011-14-9	5234	new					>975	pero	22	pero						
6281-24-9	1530	new													80	hmus
6292-68-8	1699	yes					>1250	pero	0	pero						

Table 6. (Cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRdf (%)	Species	R50 (%)	Species	REP (%)	Species
6358-64-1	2643	yes	1600	pero							1	pero				
6575-07-1	5186	new					>663	pero	47	pero						
6622-91-9	4468	new					>1138	pero	9	pero						
6626-22-8	1961	new													60	hmus
6825-25-8	4398	new					>738	pero	41	pero						
6843-20-5	1653	new													40	hmus
7149-79-3	2698	yes			760	nrat										
7361-61-7	6026	new			200	pero	>970	pero	22	pero						
7375-15-7	5974	yes			>1600	pero	>900	pero	28	pero						
7379-35-3	4413	yes			>1000 750	hmus nrat										
7393-43-3	2198	new													90	hmus
7393-66-0	105	yes	210	drab	97 29	pero gmsq	>100 >51 >12 >6	pero wchi hmus mvol	99 99 92 83	hmus mvol pero wchi	26	pero				
7467-51-8	1174	new					>1225	pero	2	pero						
7501-79-3	5902	new			>470	pero	>900	pero	28	pero						
7663-77-6	5971	yes			>1070	pero										
7682-90-8	4183	new					>763	pero	39	pero						
7745-89-3	1339	yes	1800	pero									<3.0 <1.0	hmus hmus		
7779-27-3	4195	new					>38	pero	97	pero						
8003-46-1	1993	yes	210	drab									0.13	hmus		
8023-77-6	6060	new			>480	pero	>363	pero	91	pero						

Table 6. (Cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRdf (%)	Species	R50 (%)	Species	REP (%)	Species
9003-13-8	3773	new					>800	pero	36	pero						
10031-59-1	3290	yes	42 28 18	rrat erat nrat							6	pero				
10265-93-7	4182	new	8.0	pero			>38	pero	97	pero						
10340-91-7	5176	new					>500	pero	60	pero						
10341-75-0	3037	new					>1238	pero	1	pero					10	hmus
12122-67-7	212	yes	800	dgot												
12712-85-5	285	new					>295	pero	79	pero						
13073-50-2	155	yes					>1130	pero	10	pero						
13104-13-7	47	new					>25	pero	98	pero						
13431-34-0	5896	new					>200	pero	84	pero						
13464-38-5	3779	yes	1600	pero			>563 >513	pero pero	59 55	pero pero	8 1	pero pero				
13983-15-8	622	new					>1238	pero	1	pero					75	hmus
14010-73-2	2161	yes			>470	drab										
14024-88-5	1654	new					>1150	pero	8	pero			0.67	hmus	80	hmus
14025-05-9	1655	new													70	hmus
14302-01-3	1503	yes											0.44	hmus		
14458-95-8	547	yes					<175 <125	pero pero	90 86	pero pero						
14691-35-1	1987	new													60	hmus
15029-30-8	5232	new					>1250	pero	0	pero						
15348-65-9	462	new											0.23	hmus	100	hmus

Table 6. (Cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRdf (%)	Species	R50 (%)	Species	REP (%)	Species
15590-77-9	1693	yes			>1600 >470	pero drab	>488	pero	61	pero			0.15	humus		
15739-73-8	1652	new					>888	pero	29	pero			0.52	humus	20	humus
15863-66-8	205	new					>975	pero	22	pero						
15879-93-3	3533	new					>900	pero	28	pero						
16340-15-1	1981	new					>1225	pero	2	pero			0.40	humus	90	humus
16532-79-9	5162	new					>1238	pero	1	pero						
16588-02-6	5233	new					>850	pero	32	pero						
17201-43-3	5235	new					>963	pero	23	pero						
17301-81-4	5899	new					>1000	pero	20	pero						
17586-94-6	2136	yes					>175	pero	86	pero						
17623-41-5	672	new					>688	pero	45	pero					60	humus
17747-43-2	4375	new					>1238	pero	1	pero						
17826-33-4	3542	yes	320	drab			>563	pero	55	pero	11	pero				
17826-37-8	3278	new					>838	pero	33	pero						
17826-44-7	3667	yes			>470	drab	>150	pero	88	pero	13	pero				
17826-45-8	3597	yes	210	drab			>1163	pero	7	pero	0	pero				
17826-48-1	3599	yes					>838	pero	33	pero						
18300-91-9	5850	new			>470	pero	>1175	pero	6	pero						
18979-94-7	5033	new	1600	pero			>275	pero	78	pero						
21198-18-5	5895	new					>788	pero	37	pero						
24353-61-5	4190	yes					<125	pero	90	pero						
24910-31-4	1990	new													40	humus

Table 6. (Cont.)

Table 6. (Cont.)

Table 6. (cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRdf (%)	Species	R50 (%)	Species	REP (%)	Species
61164-09-8	3324	yes			>140	nrat	>1238	pero	1	pero			>3.0 0.32	pero hmus		
63938-40-9	149	new					<38	pero	97	pero						
63992-58-5	148	new					>25	pero	98	pero						
64011-81-0	551	new	94	pero			>125	pero	90	pero						
64011-86-5	150	new					>338	pero	73	pero						
64046-58-8	2819	new					>988	pero	21	pero					60	hmus
64050-55-1	147	new					>163	pero	87	pero						
64050-67-5	556	new					>1250	pero	0	pero						
68864-04-0	2151	yes	62	drab												
74764-61-7	5975	yes			>1600	pero	>1238	pero	1	pero						
74764-65-1	6064	new			>100	nrat										
76154-77-3	2143	new													90	hmus
82679-88-7	1535	yes											0.02	hmus		
84473-96-1	6063	new			>100	nrat										
86749-15-7	2218	new	1600	pero	>470	drab	>113	pero	89	pero	19	pero				

Table 7. Results of acute toxicity, subacute toxicity and repellency tests conducted on wild and domestic mammals with chemicals listed in this publication.

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRxx (%)	Species
54-71-7	5686	yes			>80	pero										
54-96-6	4420	yes					>1050	pero	16	pero						
55-22-1	6485	new			>1000 ♂ >1000 ♂	hmus nrat										
55-37-8	275	yes					>213	pero	83	pero						
55-38-9	632	yes	42 28	pero pero			>250 <63	gmgs pero	95 80	pero gmgs	>38	pero	97	pero		
56-36-0	875	yes													0	dfir
57-24-9	3894	yes			58	ratm										
58-36-6	88	yes	140	pero			>88	wchi	93	wchi	>38	pero	97	pero		
59-67-6	6609	new			>1000 ♂ >1000 ♂	hmus nrat										
62-53-3	2609	yes			562 422	nrat hmus										
62-74-8	4008	yes			2.0 ♂ 2.0 ♀	pero pero									73	dfir
63-25-2	1330	yes					>813	pero	35	pero						
63-99-0	4518	yes					>1138	pero	9	pero						
64-47-1	5685	yes			4.0	pero										
70-55-3	2838	yes					>1138	pero	9	pero						
72-20-8	599	yes	6.0	pero	4.0 3.0	pero pero	<125	pero	90	pero						
76-24-4	4478	yes					>1163	pero	7	pero						
76-63-1	1043	yes					<133	pero	89	pero						

Table 7. (cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRxx (%)	Species
77-80-5	1613	yes					>650	pero	48	pero						
78-57-9	1622	yes					>938	pero	25	pero						
79-19-6	962	yes					>150	pero	88	pero						
80-08-0	1952	yes					>1000	pero	20	pero						
81-81-2	3780	yes	710	pero												
81-88-9	471	yes	1600	pero			>600	pero	52	pero						
82-46-2	2871	new					>1050	pero	16	pero						
82-86-0	2841	new					>1050	pero	16	pero						
83-07-8	2850	yes					>513	pero	59	pero						
83-34-1	3482	yes	>1600	pero			>450	pero	64	pero						
87-47-8	1026	yes					>163	mvol	87	mvol						
87-88-7	743	yes					>1250	pero	0	pero						
88-68-6	6486	new			1000 ♂ 750 ♂	nrat hmus										
88-74-4	6454	new			1000 ♂ 750 ♂	nrat hmus										
89-25-8	996	yes					>1238	pero	1	pero						
89-84-9	2837	new					>1238	pero	1	pero						
90-04-0	6458	new			1000 ♂ 794 ♂	nrat hmus										
91-02-1	4400	yes					>838	pero	33	pero						
91-44-1	6517	new					>1150	pero	8	pero						
91-56-5	3353	new					>1025	pero	18	pero						
92-52-4	2861	yes					>1100	pero	12	pero						

Table 7. (cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRxx (%)	Species
92-71-7	2834	new					>700	pero	44	pero						
93-75-4	271	yes					>313	hmou	75	hmou						
95-16-9	2858	new			555 ♀ 305 ♂ 346 ♂	pero pero nrat										
95-53-4	3817	yes			562 ♂	hmus										
95-54-5	3380	new			750 ♂ 750 ♂	hmus nrat										
95-55-6	3339	new			>1000 562 ♂	nrat hmus										
97-08-5	4532	yes					>1138	pero	9	pero						
98-01-1	2811	new	>470	pero			>1225	pero	2	pero						
98-58-8	4528	yes					>963	pero	23	pero						
98-98-6	6608	new			422 ♂ 422 ♂	hmus nrat										
99-05-8	6490	new			>1000 ♂ >1000 ♂	hmus nrat										
99-09-2	2679	yes			1000 ♂ 422 ♂	hmus nrat										
99-65-0	2821	yes	210	pero			>250	pero	80	pero						
99-92-3	1131	yes					<775	pero	38	pero						
99-93-4	5853	yes	320	pero												
100-01-6	2680	yes			750 ♂ 562 ♂	nrat hmus										
100-70-9	4414	yes					>1225	pero	2	pero						
100-71-0	4429	yes					>1088	pero	13	pero						

Table 7. (cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRxx (%)	Species
101-77-9	919	yes					<1050	pero	16	pero						
101-80-4	946	yes					<1025	pero	18	pero						
102-96-5	604	yes							100	pero						
104-94-9	2854	new			>1000 ♂ >1000 ♂	hmus nrat	>838	pero	33	pero						
106-47-8	933	yes			422 237	hmus nrat										
106-49-0	2610	yes			422 178	nrat hmus										
106-50-3	3377	new			316 ♂ 178 ♂	nrat hmus										
107-14-2	5170	yes					>1113	pero	11	pero						
108-34-9	734	yes					<63	hmus	95	hmus	<88	mvol	94	mvol		
108-42-9	2660	new			237 133	nrat hmus										
108-44-1	2683	new			750 ♂ 422 ♂	hmus nrat										
108-45-2	3371	new			>1000 ♂ 237 ♂	nrat hmus										
108-89-4	6133	new			750 ♂ 562 ♂	hmus nrat										
108-99-6	6484	new			1000 ♂ 750 ♂	nrat hmus										
109-06-8	6492	new			>1000 ♂ 750 ♂	hmus nrat										
109-79-5	4314	yes					>1138	pero	9	pero						
109-80-8	4340	yes					>225	pero	82	pero						

Table 7. (cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRxx (%)	Species
109-82-0	1492	yes					>1213	pero	3	pero						
111-92-2	5848	yes	470	pero												
112-55-0	4321	yes					>1150	pero	8	pero						
114-26-1	735	yes					>875	pero	30	pero	>650	pero	48	pero		
115-78-6	2172	yes					>175	pero	86	pero					5	dfir
115-90-2	15	yes					<25	pero	98	pero					88	dfir
115-91-3	16	yes					<125	pero	90	pero						
116-43-8	1931	yes					>1250	pero	0	pero						
118-92-3	5979	yes			>1000 >1000	hmus nrat										
119-38-0	733	yes					>38	hmus	97	hmus	<75	mvol	94	mvol		
121-66-4	1956	yes					>950	pero	24	pero						
121-75-5	1149	yes					>663	pero	47	pero						
122-10-1	127	yes	42	pero												
122-14-5	1243	yes					>175 >68 >50	pero pero pero	96 95 86	pero pero pero	>513 <413	mvol mvol	67 59	mvol mvol		
123-30-8	3333	new			>1000 750 ♂	nrat hmus										
130-89-2	3756	yes					>1150	pero	8	pero						
131-14-6	2872	new					>1138	pero	9	pero						
134-19-0	2652	yes					>1088	pero	13	pero						
135-20-6	2856	new					>888	pero	29	pero						
137-26-8	156	yes			>1000	nrat										
139-65-1	1953	yes					>813	pero	35	pero						

Table 7. (cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRxx (%)	Species
140-53-4	5224	yes					>1063	pero	15	pero						
140-56-7	9	yes					<125	pero	90	pero						
141-66-2	142	yes	25 20	pero pero	<50 <15.4	pero pero	38	mvol	97	mvol					80	dfir
142-59-6	1621	yes	>1600	pero											0	dfir
143-50-0	138	yes					<88	pero	93	pero						
150-13-0	6494	new			>1000 ♂ >1000 ♂	hmus nrat										
152-16-9	798	yes					<175	pero	86	pero					17	dfir
297-78-9	145	yes	8.0	pero			<313 <363	mvol hmus	95 75	hmus mvol	<338	pero	73	pero	63 50	dfir dfir
298-02-2	158	new			1.1	btjr										
298-04-4	1144	yes					<63	pero	95	pero						
299-85-4	75	yes	320	pero			>613 >88	gmgs wchi	93 51	wchi gmgs	>100	mvol	92	mvol		
300-08-3	5683	yes			>80	pero										
302-17-0	1308	yes					>1138	pero	9	pero						
315-18-4	101	yes					>125	pero	90	pero						
327-98-0	1467	yes	94	pero			>288	pero	77	pero	>163	pero	87	pero		

Table 7. (cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRxx (%)	Species
329-89-5	867	yes	18 >10	nrat wrat	51 34 33 33 18 10 33 32 23 19 ♀ 18 14 ♂ 18 12 8.3 8.2 5.5 4.5 1.5	btpd hmus btjr pero pero pero rrat coyo coyo nrat nrat nrat nutr erat mvol mvol pmou rata nngo	<275	pero	78	pero						
333-43-7	1011	yes					<150 <100	mvol hmus	92 88	hmus mvol	<13	pero	99	pero		
350-03-8	4377	yes			237 ♂ 56 ♂	hmus nrat	>1250	pero	0	pero						
462-08-8	1332	yes			75 56	hmus nrat	>1163	pero	7	pero						
495-48-7	1113	yes					>650	pero	48	pero						
501-81-5	4467	yes					>1150	pero	8	pero						
504-24-5	1327	yes			13 ♂ 10 ♂	nrat hmus										
504-29-0	4394	yes				>1163	pero	7	pero							
513-44-0	4328	yes					>1250	pero	0	pero						
536-90-3	6459	new			1000 ♂ 1000 ♂	hmus nrat										
537-91-7	1963	yes					>1250	pero	0	pero						

Table 7. (cont.)

Table 7. (cont.)

Table 7. (cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRxx (%)	Species
1067-33-0	1971	yes													7	dfir
1072-97-5	4379	yes					>1250	pero	0	pero						
1115-06-6	1974	yes					>375	pero	70	pero						
1153-06-6	1689	yes					>450	pero	64	pero						
1314-84-7	3745	yes					<213	pero	83	pero						
1461-22-9	506	yes					>63	pero	95	pero						
1461-25-2	1968	yes					>838	pero	33	pero	>900	pero	28	pero		
1491-41-4	204	yes					>413	pero	67	pero						
1569-69-3	4332	yes					>1250	pero	0	pero						
1609-86-5	5169	yes					>1188	pero	5	pero						
1716-09-2	18	yes	94	pero												
1728-97-8	1986	yes					>1250	pero	0	pero						
1740-24-5	1989	yes					>1250	pero	0	pero						
1783-81-9	6457	new			>1000 ♂ >1000 ♂	hmus nrat										
1885-29-6	5189	yes					>1238	pero	1	pero						
1965-19-1	1985	yes					>1238	pero	1	pero						
2032-59-9	736	yes			27	pero										
2050-66-0	2853	new					>1050	pero	16	pero						
2237-30-1	6496	new			562 ♂ 487 ♂	nrat hmus										
2293-07-4	4508	yes					<975	pero	22	pero						
2322-38-5	5534	new			>100	pero	<1000 <825	pero pero	34 20	pero pero						

Table 7. (cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRxx (%)	Species
2385-85-5	727	yes					>1163	pero	7	pero						
2390-59-2	1422	yes	>210	pero												
2396-68-1	4331	yes					>1000	pero	20	pero						
2425-06-1	3016	yes					>563	pero	55	pero					10 0	dfir dfir
2439-01-2	240	yes					>375	pero	70	pero						
2439-10-3	2300	yes	710 >470	pero drab			>513	pero	59	pero					4	dfir
2444-96-4	1227	yes					>1200	pero	4	pero						
2457-76-3	6389	yes			>4800	nrat										
2492-26-4	1132	yes					>875	pero	30	pero						
2592-62-3	49	yes					<150 <88	gmgs hmus	93 88	hmus gmgs	<113 <50	pero mvol	96 91	mvol pero		
2595-54-2	65	yes					>263	hmus	79	hmus	>113	pero	91	pero		
2597-03-7	6	yes					>125	pero	90	pero						
2621-80-9	2668	yes					<800	pero	36	pero						
2636-26-2	32	yes	320	pero			>250	hmus	80	hmus	>13	pero	99	pero		
2667-49-4	26	new	94	pero			>400 >388 >288 >150 >113 >88	hmus mvol mvol pero pero pero	93 91 88 77 69 68	pero pero pero mvol mvol hmus	>75 >63 >50 >38 >25	pero pero pero pero pero	98 97 96 95 94	pero pero pero pero pero	46	pero
2668-92-0	208	yes	>938	pero	25	pero	>50	pero	96	pero	<175	mvol	86	mvol		
2781-10-4	2132	yes	1600	pero			>75	pero	94	pero						
2826-32-6	913	yes					>738	pero	59	pero						

Table 7. (cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRxx (%)	Species
2830-86-6	1247	yes	28	pero			<150	mvol	88	mvol						
2830-87-7	1246	yes					<138	mvol	89	mvol						
2835-68-9	6480	new			>1000 ♂ >1000 ♂	hmus nrat										
2865-70-5	103	yes					>163	pero	87	pero						
2872-96-0	566	yes	94	pero			>975	mvol	26	mvol	>700	mvol	44	mvol		
2951-17-9	17	yes					38 >13	pero hmus	99 97	hmus pero						
2984-65-8	2300a	yes	94	pero			>63	pero	95	pero						
2987-53-3	1951	yes			>1000 1000	hmus nrat	>775	pero	38	pero						
3212-18-8	11	yes					>1175 >13	pero pero	99 6	pero pero						
3212-19-9	10	yes					>1013 >175	pero pero	86 19	pero pero						
3222-82-0	1980	yes													24	dfir
3316-24-3	5375	yes	>710	pero	1060	pero	>300	pero	76	pero						
3489-28-9	4346	yes					>713	pero	43	pero						
3544-24-9	6623	new			>1000 ♂ >1000 ♂	hmus nrat										
3567-95-1	255	yes					>1163	pero	7	pero	>1150	pero	8	pero		
3686-91-7	13	yes	42	pero			>100	pero	93	pero						
3691-35-8	3776	yes	140	pero	12 4.4 2.1 0.49	rata ratm nrat pero										
3695-77-0	4337	yes					>1113	pero	11	pero						

Table 7. (cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRxx (%)	Species
3731-51-9	6602	new			750 ♂ 562 ♂	nrat hmus										
3731-53-1	4386	yes					>1200	pero	4	pero						
3766-55-0	5894	yes					>375	pero	70	pero						
4101-14-7	714	yes	45	cags	51 20 10 6.8 5.6 4.4 2.9	btpd ratm krat npgg pmou mvol rata										
4229-92-8	5836	yes	<470	pero												
4234-79-1	1358	new					<588	pero	53	pero	<375	pero	70	pero		
4342-36-3	1969	yes													12	dfir
4412-09-3	396	yes					>900	pero	28	pero						
4672-86-0	5684	yes			33	pero										
5034-58-2	1357	yes					>963	mvol	23	mvol	>1038	pero	17	pero		
5035-67-6	1964	yes					>25	pero	98	pero						
5299-52-5	916	yes					>275	pero	78	pero						
5332-06-9	5173	yes					>1150	pero	8	pero						
5598-13-0	790	yes	320	pero												
5847-51-8	1970	yes					>38	pero	97	pero						
5847-52-9	1965	yes													1	dfir
5847-55-2	2030	yes					>175	pero	86	pero					7	dfir
5863-72-9	1966	yes													17 7	dfir dfir

Table 7. (cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRxx (%)	Species
5902-78-3	23	yes	1.6	pero			<275	pero	78	pero						
5903-08-2	14	yes	94	pero			>363 >138 >63	pero pero pero	95 89 71	pero pero pero						
6385-58-6	1991	new					>1138	pero	9	pero						
6626-22-8	1961	yes					>1213	pero	3	pero						
6968-72-5	4473	yes					>1125	pero	10	pero						
7393-66-0	105	yes	210	pero											82 26 6	ppin dfir dfir
7645-25-2	3794	new	>1600	pero			>650 >550	pero pero	56 48	pero pero						
7681-49-4	965	yes					<988	pero	21	pero						
7700-17-6	143	yes					>675 138	hmou mvol	91 46	mvol hmou	>1113	pero	11	pero		
7745-89-3	1339	yes					>300	pero	76	pero	>224	pero	82	pero		
7779-27-3	4195	yes					>1238	pero	1	pero						
7784-25-0	2657	yes					>975	pero	22	pero						
8000-96-2	1975	yes					>1250	pero	0	pero						
8022-00-2	1620	new	62	pero			>200	pero	84	pero					50 30	dfir dfir
10191-74-9	1374	yes					<13	pero	99	pero						
10340-91-7	5176	yes					>438	pero	65	pero						
13085-88-6	2824	new					>738	pero	41	pero						
13104-13-7	47	yes					>133 >25 >13	gmgs hmuš hmou	99 98 89	hmou hmuš gmgs	<125 <25	krat mvol	98 90	mvol krat		

Table 7. (cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRxx (%)	Species
13121-70-5	1619	yes	>1070 >210 1070	pero pero hmus												
13431-34-0	5896	yes					>188	pero	85	pero						
13463-41-7	171	yes	>210	pero			>375 >313	pero pero	75 70	pero pero						
14458-95-8	547	yes					<388	crat	69	crat					24	dfir
14548-46-0	4402	yes					>1038	pero	17	pero						
14548-48-2	4408	yes					>1075	pero	14	pero						
14691-35-1	1987	yes					>1188	pero	5	pero						
14816-18-3	3545	yes					>263	pero	79	pero					5	dfir
15590-77-9	1693	yes					>463	pero	63	pero						
15827-14-2	2135	yes					>1250	pero	0	pero						
16179-97-8	4466	yes					>1138	pero	9	pero						
16752-77-5	2830	yes					>763	pero	39	pero						
17576-41-9	2669	yes					>1125	pero	10	pero						
17804-35-2	2831	new					>900	pero	28	pero						
17826-37-8	3278	yes	710	pero												
17826-45-8	3597	yes					>1075	pero	14	pero						
18251-82-6	967	yes					>875	pero	30	pero	>938	pero	25	pero		
19645-42-2	3234	yes					>263	pero	79	pero						
19715-19-6	4591	yes					>983	pero	21	pero						
20368-13-2	914	yes					>300	pero	76	pero						
21198-18-5	5895	yes					>775	pero	38	pero						

Table 7. (cont.)

CAS Reg. No.	DRC No.	Add. Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	LDfr (mg/kg/d)	Species	FR (%)	Species	FRxx (%)	Species
22482-43-5	5379	yes	>710	pero												
24910-31-4	1990	yes					>1225	pero	2	pero						
25537-46-6	1244	yes					<50	mvol	96	mvol						
27641-19-6	4555	yes					>983	pero	21	pero						
29118-87-4	4272	yes					>450	pero	64	pero						
30894-16-7	5180	yes	470	pero			>300	pero	76	pero						
33322-20-2	5362	yes	<710	pero												
34445-68-6	543	yes					>725	pero	42	pero						
34491-12-8	3789	yes					>438	pero	65	pero						
35455-61-9	5030	yes	1600	pero			>288	pero	77	pero						
35455-62-0	5031	yes					<738	pero	41	pero						
35944-86-6	128	yes					>13	hmus	99	hmus						
37335-68-5	3757	yes					>788	pero	37	pero						
38667-55-9	2839	new					>1225	pero	2	pero						
39387-42-3	3758	yes					<850	pero	32	pero						
42062-39-5	3323	new	470	pero			>750	pero	40	pero						
43036-06-2	5166	yes					>1063	pero	15	pero						
50708-20-8	126	yes					>25	hmus	98	hmus					98 ^{wchi} 98 76	ppin ppin ppin
52053-86-8	1907	yes													6	dfir
56240-91-6	5830	new			480	pero	>513	pero	59	pero						
56240-92-7	5829	new			720	pero	>1125	pero	10	pero	>375	pero	70	pero		
56240-93-8	5828	new			720	pero	>225	pero	82	pero						

Table 7. (cont.)

Table 8. Results of acute toxicity, subacute toxicity and repellency tests conducted on wild and domestic mammals with chemicals listed in this publication.

Table 8. (cont.)

Table 8. (cont.)

CAS Reg. No.	DRC No.	ADD Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LD50 ^a (mg/kg)	Species	FR (%)	Species	LDfr (mg/kg/d)	Species	FRdf (%)	Species	R50* REP+ (%)	Species
574-45-8	3020	yes			390	nrat										
597-64-8	5945	new			180	pero			67	pero	<413	pero				
640-19-7	133	new							91	pero	>113	pero				
661-69-8	2186	yes	28 ♀ 8.0 12 ♀ 8.0 3.7	nrat nrat rrat pero erat	22 ♂ F18 F15 12 ♂ 8.2	nrat nrat nrat nrat nrat	6.8 6.8 5.6 4.6 0.62	nrat rrat rrat erat pero								
818-08-6	5948	new							56	pero	>550	pero				
947-42-2	3017	yes			210	nrat										
996-08-7	5949	new							60	pero	>500	pero				
1007-36-9	438	new							13	pero	>1088	pero				
1121-14-8	2755	new							36	pero	>800	pero				
1122-58-3	4428	yes			>42	nrat										
1193-54-0	5956	new			120	pero			81	pero	>238	pero				
1314-62-1	2978	new	210 140 ♀ 42 28	nrat nrat erat pero	140 ♀ 112 ♂ 104 ♀ 94 ♀	nrat nrat nrat nrat	94 27 18	rrat rata mvol	90	pero	>125	pero				
1314-84-7	3745	yes			62	rigs			100 99 98 95	btpd btpd btpd pero	19	pero				
1528-07-0	5947	new							0	pero	>1250	pero				
1563-66-2	4917	yes			6.6 ♂	hmus										
1754-58-1	2281	new	710 94 42	pero drab drab									0	pero		

Table 8. (cont.)

Table 8. (cont.)

Table 8. (cont.)

CAS Reg. No.	DRC No.	ADD Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LD50 ^a (mg/kg)	Species	FR (%)	Species	LDfr (mg/kg/d)	Species	FRdf (%)	Species	R50* REP+ (%)	Species
36507-21-8	2474	new	210 140 140 94 62 28 77 62 42 42 42 28 42 >32	btjr btjr nutr nrat nrat nrat cags pero pero erat erat rrat coyo	182 99 93 77 66 72 52 42	btjr pero pero pero pero mmou rrat btpd	35 ♀ 33 32 ♂ 27 14 12 7.4 1.8	nrat nrat nrat erat rata mvol rrat npgg	89	pero	<138	pero	22	pero		
37345-24-7	5976	yes			>11	nrat	<400 ♂	nrat								
51594-83-3	6027	yes			>470 >120 ♀ 21 ♂ 18 ♂ 16 ♀	nrat nrat nrat nrat nrat	83 ♂ 14 ♀ 13 ♂ 35 ♂ 9.8	hmus hmus hmus pero btjr								
51594-86-6	6092	yes			1.0 ♂	nrat	3.5 ♂	hmus								
52243-27-3	5644	new							41	pero	>738	pero				
52399-94-7	5638	new							54	pero	<575	pero				
52400-00-7	5639	new							35	pero	>813	pero				
53516-81-7	4575	new	94 62 <28	pero pero nrat	<28	nrat	<200	nrat	60	pero	<500	pero				
53558-25-1	6091	yes			<10 ♂	nrat	65 ♂	hmus								
53710-61-5	5393	yes											49	pero		
55864-37-4	5245	new							0.0	pero	>1250	pero				
57548-01-3	749	new												+0	hmus	
58550-89-3	606	new												+0	hmus	

Table 8. (cont.)

CAS Reg. No.	DRC No.	ADD Data	ALD (mg/kg)	Species	LD50 ^a (mg/kg)	Species	LD50 ^a (mg/kg)	Species	FR (%)	Species	LDfr (mg/kg/d)	Species	FRdf (%)	Species	R50* REP+ (%)	Species
74664-33-8	464	new							100	hmus					*0.34	hmus
74685-15-7	463	new							100	hmus					*0.27	hmus

Table 9. The phytotoxic effects of chemicals listed in this publication when applied to plant seeds or vegetation.

CAS Reg. No.	DRC No.	Seed Germination			Foliar Spray			
		Corn (%)	Wheat (%)	Wheat (%)	Pinto Bean (%)	Douglas Fir (%)	Corn (%)	Wheat (%)
55-37-8	275		0		>1.0	<6.0	>6.0	
55-38-9	632		2		<1.0			
56-36-0	875		0					
56-72-4	1324		56					
58-08-2	630		0					<1.0
58-36-6	88	93	0					<0.5
58-89-9	165							<0.5
60-41-3	4040		89					
60-51-5	1323		0					
62-74-8	4008		69					
63-25-2	1330		18					
65-30-5	4221							>0.5
72-00-4	2279		11					
76-63-1	1043		90	92				
76-87-9	876		8	25	>6.0		>6.0	
77-58-7	2131		4	94	<1.0		>1.0	<6.0
77-80-5	1613		6					
78-04-6	2154		81		>1.0	<6.0	>6.0	
80-12-6	163		89					
81-88-9	471		4					
82-43-9	2874		89					
83-07-8	2850				>1.0	<6.0	>1.0	<6.0
87-47-8	1026		61					
88-04-0	5024				<6.0		<6.0	
89-69-0	2653		0		<1.0		<1.0	
93-75-4	271		49		>6.0		>6.0	
95-69-2	2633				<6.0		<6.0	

Table 9. (cont.)

CAS Reg. No.	DRC No.	Seed Germination			Foliar Spray				
		Corn (%)	Wheat (%)	Wheat (%)	Pinto Bean (%)	Douglas Fir (%)	Corn (%)	Wheat (%)	
95-74-9	1347				>0.3		>0.3	<1.2	
96-53-7	2794		6		<1.0		>1.0	<6.0	
102-96-5	604		0		<1.0		<1.0		
103-33-3	2847				>6.0		>6.0		
107-49-3	153		89						
108-34-9	734		15						
109-57-9	4481				<6.0		<6.0		
109-80-8	4340				>1.0	<6.0	>1.0	<6.0	
113-92-8	2600		81		<6.0		<6.0		
114-26-1	735								>1.0
115-78-6	2172		0		<1.0		<1.0		
115-90-2	15		10						
115-91-3	16		0						
116-06-3	1940		24	70					
116-43-8	1931				>6.0		>6.0		
117-78-2	2873				<6.0		>6.0		
119-38-0	733		50						
121-75-5	1149				<6.0		<6.0		
122-10-1	127		30						
122-14-5	1243		3	4					
122-15-6	1910		40		<1.0		<1.0		
137-26-8	156		57		>6.0		>6.0		<1.0
140-56-7	9		64						
141-66-2	142		100						
142-59-6	1621		17		>1.0	<6.0	>1.0	<6.0	
143-50-0	138		97						
152-16-9	798		69	98					
297-78-9	145		94						

Table 9. (cont.)

CAS Reg. No.	DRC No.	Seed Germination			Foliar Spray			
		Corn (%)	Wheat (%)	Wheat (%)	Pinto Bean (%)	Douglas Fir (%)	Corn (%)	Wheat (%)
297-99-4	1319		12					
298-04-4	1144		19					
299-84-3	582		46					>1.0
299-85-4	75		3					
311-47-7	139		18					
315-18-4	101		90					
328-04-1	1875		6					
329-89-5	867		32	66				<1.0
330-64-3	2823		60					
333-29-9	1776		0					
333-43-7	1011		68	90				0.82
379-52-2	2148		6					
439-14-5	1320		93					
504-88-1	2540		26		<6.0		<6.0	
524-42-5	1130		27		>1.0	<6.0	>1.0	<6.0
544-47-8	4490				>6.0		>6.0	
563-25-7	2130		32	75	>1.0	<6.0	>1.0	<6.0
671-04-5	2813		70					
683-18-1	2156		7		<1.0		>6.0	
786-19-6	1229		61					
814-91-5	3568				<6.0		>6.0	
886-80-6	2215		33					
900-95-8	877		0	3	<1.0		>6.0	
919-44-8	2538		62					
922-86-1	1245		89					
944-22-9	1878		36					
947-02-4	1778		16					
953-17-3	1228		72					

Table 9. (cont.)

Table 9. (cont.)

CAS Reg. No.	DRC No.	Seed Germination			Foliar Spray			
		Corn (%)	Wheat (%)	Wheat (%)	Pinto Bean (%)	Douglas Fir (%)	Corn (%)	Wheat (%)
2951-17-9	17		26					
2984-64-7	39		3					
2984-65-8	2300a		7		>6.0		>6.0	
3107-79-9	166		0		<1.0		<1.0	
3186-12-7	22		90					
3186-14-9	21		73					
3212-18-8	11		0					
3212-19-9	10		72					
3222-82-0	1980		92		>6.0		>6.0	
3267-78-5	2149		0					
3304-97-0	3777				<6.0		<6.0	
3309-71-5	25		92					
3568-51-2	2		86					
3568-56-7	29		92					
3686-91-7	13		39					
3687-13-6	3762		0		>1.0	<6.0	>6.0	
3736-81-0	2809				<6.0		>6.0	
3911-05-5	1932		16					
4104-14-7	714		85					
4156-44-9	1731		18					
4253-22-9	2127		18		<1.0		<1.0	
4342-36-3	1969		8		<1.0		>6.0	
4428-05-1	273		22	44	<1.0	<2.0	>5.0	>6.0
4808-30-4	2152		0		<1.0		<1.0	
5035-67-6	1964				<1.0		>1.0	<6.0
5374-06-1	5029				<6.0		<6.0	
5459-10-9	1698		17					
5576-54-5	1983		5		>1.0	<6.0	>1.0	<6.0

Table 9. (cont.)

CAS Reg. No.	DRC No.	Seed Germination			Foliar Spray			
		Corn (%)	Wheat (%)	Wheat (%)	Pinto Bean (%)	Douglas Fir (%)	Corn (%)	Wheat (%)
5598-13-0	790		12					
5840-95-9	1876		13					
5847-48-3	1967		0		<1.0		<1.0	
5847-51-8	1970		94					
5847-52-9	1965		3		<1.0		>1.0	<6.0
5847-54-1	2123		0		<1.0		>1.0	<6.0
5847-55-2	2030		8	71 88	>5.0	>6.0	>5.0	>6.0
5863-72-9	1966		0		>1.0	<6.0	<1.0	
5902-46-5	7		100					
5902-52-3	1140		39					
5902-78-3	23		80					
5903-08-2	14		0					
6358-64-1	2643		0		<1.0		<1.0	
6392-46-7	2529		82					
7205-22-3	2229		0					
7393-66-0	105		0		>6.0		>6.0	
7700-17-6	143		0					
7745-89-3	1339		0		<6.0		<6.0	
7778-44-1	3793				<6.0		>6.0	
8003-46-1	1993		0	98				
10031-59-1	290		0					
10191-74-9	1374		93					
13104-13-7	47		0					
13121-70-5	1619		3		>6.0		>6.0	
13435-05-7	2146		0	98	<1.0		>1.0	<6.0
13463-41-7	171		98		<6.0		>6.0	
13464-38-5	3779		0		<6.0		<6.0	

Table 9. (cont.)

CAS Reg. No.	DRC No.	Seed Germination			Foliar Spray			
		Corn (%)	Wheat (%)	Wheat (%)	Pinto Bean (%)	Douglas Fir (%)	Corn (%)	Wheat (%)
13636-33-4	2902		7					
14010-73-2	2161				<1.0	>6.0	>1.0	<6.0
14458-95-8	547		100					
14816-18-3	3545		85	93	<6.0		<6.0	
15590-77-9	1693		45	53	>6.0		>6.0	
17586-94-6	2136		38	60	>1.0	<6.0	<1.0	>6.0
17623-41-5	672		16					
17650-76-9	2913		0					
17826-27-6	3173		0					
17826-33-4	3542		40	58	>6.0		>6.0	
17826-44-7	3667		4		>6.0		>6.0	
17826-45-8	3597		15	83	>6.0		>6.0	
18152-09-2	2097		52					
18979-94-7	5033				<6.0		<6.0	
25573-46-6	1244		4					
28801-69-6	1972		2		<1.0		>6.0	
34445-68-6	543		82					
35455-61-9	5030				>6.0		<6.0	
35455-62-0	5031				>6.0		>6.0	
35944-73-1	1833		13					
35944-86-6	128		0					
36530-23-1	157		88		>6.0		>6.0	
50708-20-8	126		85					
52053-86-8	1907		13		>6.0		>6.0	
61164-09-8	3324	>0.5						
63938-40-9	149		96					
63922-58-5	148		15					
64011-81-0	551		79					

Table 9. (Cont.)

CAS Reg. No.	DRC No.	Seed Germination			Foliar Spray			
		Corn (%)	Wheat (%)	Wheat (%)	Pinto Bean (%)	Douglas Fir (%)	Corn (%)	Wheat (%)
64011-86-5	150		85					
64050-55-1	147		0					
64205-22-7	2891		0					
68864-04-0	2151		29		>6.0		>6.0	
82679-88-7	1535		95		>6.0		>6.0	
82679-90-1	2220		0					
82980-43-6	2530		15					
82980-44-7	2531		0					
82980-46-9	2534		0					
86749-15-7	2218		0		<6.0		>6.0	

Table 10. (cont.)

CAS Reg. No.	DRC No.	Add. Data	Seed Germination				Foliar Spray			
			Wheat (%)	Species (%)	Species (%)	Pinto Bean (%)	Douglas Fir (%)	Species (%)		
141-66-2	142	yes		logp lpin bwal espr	100 100 95 88	dfir ppin bbru pnpn	81 72 68 20			
143-50-0	138	yes	98							
298-04-4	1144	yes	20							
311-47-7	139	yes	19	bbru	54	lpin	83			
315-18-4	101	new		bwal bbru dfir logp	95 89 88 72	ppin pnpn lpin	55 15 12			
327-98-0	1467	new	7 0							
329-89-5	867	yes	67							
333-43-7	1011	yes	92							
439-14-5	1320	yes	97							
504-88-1	2540	yes	27				<10	<10		
524-42-5	1130	yes	28							
563-25-7	2130	yes	33 77					>6.0		
786-19-6	1229	yes	64							
900-95-8	877	yes	30 31					>5.0		
919-44-8	2538	yes	64							
922-86-1	1245	yes	94							

Table 10. (cont.)

CAS Reg. No.	DRC No.	Add. Data	Seed Germination				Foliar Spray			
			Wheat (%)	Species	(%)	Species	(%)	Pinto Bean (%)	Douglas Fir (%)	Species (%)
944-22-9	1878	yes	38							
947-02-4	1778	yes	17							
953-17-3	1228	yes	77							
1067-33-0	1971	yes	90					>5.0	>5.0	
1115-06-6	1974	yes	100					>5.0	>5.0	
1754-58-1	2281	new	99					>6.0	>6.0	
1804-58-6	2535	yes	51							
2032-65-7	736	yes		dfir	>1					
2390-59-2	1422	yes	6					>5.0	>5.0	
2425-06-1	3016	yes	100					>1.0		
2439-01-2	240	yes	91					>10 >5.0	>10 >5.0	
2439-10-3	2300	yes	7					>6.0	>6.0	
2592-62-3	49	yes	95 92 0							
2636-23-9	24	yes	91							
2636-26-2	32	new	19 0	ppin	30			<1.0	>1.0 <5.0	
2667-49-4	26	yes	85							
2668-92-0	208	yes	98							
2703-13-1	20	new		ppin	19					

Table 10. (cont.)

CAS Reg. No.	DRC No.	Add. Data	Seed Germination				Foliar Spray			
			Wheat (%)	Species (%)	Species (%)	Species (%)	Pinto Bean (%)	Douglas Fir (%)	Species (%)	Species (%)
2781-10-4	2132	yes	5				>1.0	<6.0	>1.0	<6.0
2799-95-3	2535	yes	41							
2830-86-6	1247	yes	86							
2830-87-7	1246	yes	94 86							
2872-96-0	566	new	25							
2939-97-1	1976	yes	34				>5.0	>5.0		
2951-17-9	17	yes	21							
2984-64-7	39	yes		ppin	27					
2984-65-8	2300	yes	18 17							
3186-12-7	22	yes		ppin	24					
3186-14-9	21	yes		ppin	40					
3212-18-8	11	yes	60 1							
3222-82-0	1980	yes	97				>5.0	>5.0		
3247-32-3	270	new	0							
3254-63-5	137	new	1	lpin	82					
3309-71-5	25	yes	97							
3309-77-1	427	new	36							
3567-95-1	255	new	48							
3568-56-7	29	yes	97							

Table 10. (cont.)

CAS Reg. No.	DRC No.	Add. Data	Seed Germination				Foliar Spray			
			Wheat (%)	Species	(%)	Species	(%)	Pinto Bean (%)	Douglas Fir (%)	Species (%)
3686-91-7	13	yes	3							
3734-97-2	79	new	58	bbru lpin logp	100 100 94	dfir ppin	88 87			
4156-44-9	1731	yes	19							
4234-79-1	1358	new	88 84							
4342-36-3	1969	yes							>5.0	
4932-80-3	1979	yes	16							
5035-67-6	1964	yes							>1.0 <5.0	
5219-61-4	2751	yes	61							
5576-54-5	1983	yes						>1.0 <5.0	>1.0 <5.0	
5840-95-9	1876	yes	14							
5847-51-8	1970	yes	0							
5847-52-9	1965	yes							>1.0 <5.0	
5847-55-2	2030	yes	92 84 17							
5863-72-9	1966	yes						<1.0	>1.0 <5.0	
5902-78-3	23	yes	84	ppin	25					
6392-46-7	2529	yes	85							
6505-75-5	626	new	0							
7393-66-0	105	yes						>5.0	>5.0	

Table 10. (Cont.)

CAS Reg. No.	DRC No.	Add. Data	Seed Germination				Foliar Spray			
			Wheat (%)	Species	(%)	Species	(%)	Pinto Bean (%)	Douglas Fir (%)	Species (%)
7645-25-2	3794	new						<6.0	>6.0	
7700-17-6	143	yes	14	bwal	16					
7745-89-3	1339	yes						>5.0	>5.0	
8022-00-2	1620	new	1							
10191-74-9	1374	yes	0							
13104-13-7	47	yes	26 18							
13121-70-5	1619	yes						>5.0	>5.0	
13463-41-7	171	yes	91	llpn	85	ppin	100	<5.0	>5.0	
14458-95-8	547	yes	97	dfir logp lpin logp	100 100 100 93	slpn slpn ppin	93 91 74			
14816-18-3	3545	yes	5							
15863-66-8	205	new	24							
16743-23-0	1932	yes	17							
17586-94-6	2136	yes	39							
17826-33-4	3542	yes	41							
17826-42-5	2386	yes	56							
25537-46-6	1244	yes	100 3							
28801-69-6	1972	yes						>5.0		

Table 10. (cont.)

CAS Reg. No.	DRC No.	Add. Data	Seed Germination				Foliar Spray			
			Wheat (%)	Species	(%)	Species	(%)	Pinto Bean (%)	Douglas Fir (%)	Species (%)
34445-68-6	543	yes	83	bbru bbru logp	99 92 86	llpn espr	45 0			
36507-21-8	2474	new	4							
50708-20-8	126	yes		bwal	100					
52053-86-8	1907	yes	14					>5.0	>5.0	
61164-09-8	3324	yes							>1.0	lett ppin soyb
63938-40-9	149	yes	1	bbru logp dfir	77 77 63	ppin llpn espr	42 35 0			
63981-11-3	1268	new	6							
63992-58-5	148	yes		bbru	26	logp	85			
64011-81-0	551	yes	80	bbru	0					
64011-86-5	150	yes	86	bbru	19					
64050-55-1	147	yes		logp	75					
68864-04-0	2151	yes	30							
82679-88-7	1535	yes						>5.0 >1.0 >0.02	>5.0 >1.0 >0.02	