

DISINFECTANTS APPROVED FOR USE AGAINST FOOT-AND-MOUTH DISEASE VIRUS IN FARM SETTINGS

Table 1 below is intended to assist in finding U.S. Environmental Protection Agency (EPA)-registered disinfectants that may be used against foot-and-mouth disease virus (FMDv) in farm settings. The information was obtained from the National Pesticide Information Retrieval System (NPIRS®)¹ on September 30, 2020. The list may not be an all-inclusive list of EPA-registered disinfectants. The inclusion of any product on this table does not imply endorsement of the product by United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS).

The biosecurity officer of the USDA APHIS or State partner incident management team responding to a foreign animal disease incident should use, as their first recourse, a commercially available EPA-registered disinfectant according to the State-registered container label (i.e., the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) section 3 label). In table 1, the summarized use sites are from EPA-registered labels and can be found on [EPA's Pesticide Product Label System \(PPLS\)](#). EPA-registered labels are often identical to the State-registered container labels; however, State labels may differ from EPA labels. Please use table 1 as a first step to identify a potential EPA-registered product to use against FMDv. Next, to locate the appropriate State-registered container label and verify all necessary uses are also on the container label, visit: <http://npirspublic.ceris.purdue.edu/state/>.

If a suitable commercially available EPA and State-registered disinfectant is not available, only then may a disinfectant approved for use against FMDv under the FIFRA section 18 be used according to its section 18 label. Disinfectants approved for use against FMDv under a section 18 exemption are available on the [APHIS VS disinfectant website](#). Biosecurity officers should have a paper or electronic copy of the container label and, if applicable, section 18 label, and ensure that disinfectants are prepared and applied according to the appropriate label(s). Biosecurity officers using a section 18 disinfectant must record the amounts used and report this on a monthly basis to Nathan.G.Birnbaum@usda.gov and Samantha.Bates@usda.gov.

¹ The National Pesticide Information Retrieval System (NPIRS®) is a collection of pesticide-related databases, applications, and websites under the administration of the Center for Environmental and Regulatory Information Systems (CERIS) at Purdue University, West Lafayette, Indiana. The NPIRS® obtains product information on a monthly basis from the EPA Pesticide Product Information System (PPIS) website. This PPIS information, including registered use sites and pests listed on the EPA stamped approved label, is disseminated through the NPIRS® member and public websites and is provided for informational purposes only. Information derived from the NPIRS® does not constitute a label replacement or a recommendation. Before applying any pesticide, applicators must determine if the product under consideration is correct for the intended use site. Always check the container/package label to determine if the intended use site is included on the label. Read and follow label instructions before using any pesticide product. More information on the NPIRS® can be found at <http://ppis.ceris.purdue.edu/>. Errors in the PPIS data can be reported at this website using the Data Quality menu option.

Table 1. U.S. Environmental Protection Agency (EPA)-registered disinfectants that may be used against foot-and-mouth disease virus (FMDv) in farm settings								
Reg. type	EPA Reg No	Product name	Manufacturer	Active ingredient(s)	Concentration (product/water)	Contact time	Registered use sites according to NPIRS (Must confirm with container label)	EPA-approved label
FIFRA section 3	1677-129	Oxonia Active (Alternate name, Oxysept 333)	Ecolab, Inc.	Hydrogen peroxide Peroxyacetic acid	0.5 oz /gal	10 min	Livestock barns, livestock premises, animal quarters, animal cages, animal feeding/watering equipment, milking equipment, dairy equipment, and agricultural premises.	https://www3.epa.gov/pesticides/chem_search/ppls/001677-00129-20200303.pdf
FIFRA section 3	6836-86	Lonza DC 101	Lonza, Inc.	Alkyl dimethyl benzyl ammonium chloride Didecyl dimethyl ammonium chloride Octyl decyl dimethyl ammonium chloride Dioctyl dimethyl ammonium chloride	4 oz/gal	30 min	Livestock premises, livestock feeding and watering equipment, and livestock equipment.	https://www3.epa.gov/pesticides/chem_search/ppls/006836-00086-20121017.pdf
FIFRA section 3	10324-67	Maquat MQ615-AS	Mason Chemical Company	Alkyl dimethyl benzyl ammonium chloride Didecyl dimethyl ammonium chloride Octyl decyl dimethyl ammonium chloride Dioctyl dimethyl ammonium chloride	1 oz/gal	10 min	Livestock premises, livestock feeding and watering equipment, livestock equipment, livestock transportation vehicles, hog farrowing houses, hog barns/houses/parlors/pens, farrowing equipment, animal feeding and watering equipment, animal equipment, animal transportation vehicles, and shoe baths.	https://www3.epa.gov/pesticides/chem_search/ppls/010324-00067-20190710.pdf
FIFRA section 3	39967-137	Virkon S	Lanxess Corporation	Sodium chloride Potassium peroxymonosulfate	1.3oz (1 sachet) /gal	10 min	Animal feed equipment, livestock barns, livestock pens, livestock stalls, livestock stables, livestock equipment, cattle feedlot, hog farrowing pen premises, hog barns/houses/parlors/pens, animal quarters, animal feeding and watering equipment, animal equipment, agricultural premises, agricultural equipment, animal transportation vehicles, and human footwear.	https://www3.epa.gov/pesticides/chem_search/ppls/039967-00137-20200629.pdf

Table 1. U.S. Environmental Protection Agency (EPA)-registered disinfectants that may be used against foot-and-mouth disease virus (FMDv) in farm settings								
Reg. type	EPA Reg No	Product name	Manufacturer	Active ingredient(s)	Concentration (product/water)	Contact time	Registered use sites according to NPIRS (Must confirm with container label)	EPA-approved label
FIFRA section 3	70060-19	Aseptrol S10-TAB	BASF Catalysts, LLC	Sodium chlorite Sodium dichloroisocyanurate dihydrate	6 g (1 tablet) /gal	30 min	Animal cages, animal stables, animal feeding/watering equipment, animal equipment, and animal transportation vehicles.	https://www3.epa.gov/pesticides/chem_search/ppls/070060-00019-20151019.pdf
FIFRA section 3	70060-30	Aseptrol FC-TAB	BASF Catalysts, LLC	Sodium chlorite Sodium dichloroisocyanurate dihydrate	12 g (two 6g tablets) /gal	30 min	Livestock premises, livestock feeding equipment, livestock watering equipment, livestock equipment, livestock transportation equipment, animal quarters, animal cages, animal feeding and watering equipment, animal equipment, animal transportation vehicles, and shoe baths.	https://www3.epa.gov/pesticides/chem_search/ppls/070060-00030-20121106.pdf
FIFRA section 3	74559-4	*ACCEL Concentrate Disinfectant Cleaner	Virox Technologies	Hydrogen peroxide	2oz/gal	10 min	Dairy farms, livestock premises, livestock buildings, animal quarters, animal cages, animal feeding/watering equipment, animal equipment, animal transportation vehicles, farm premises, agricultural buildings, shoe baths, and barns.	https://www3.epa.gov/pesticides/chem_search/ppls/074559-00004-20200908.pdf
FIFRA section 18	N/A	Various	Various	Acetic acid	0.5% acetic acid	10 min	Hard, nonporous, nonfood items, or surfaces potentially contaminated with FMDv.	https://www.aphis.usda.gov/animal_health/emergency_management/downloads/acetic-acid-revised-label.pdf

Table 1. U.S. Environmental Protection Agency (EPA)-registered disinfectants that may be used against foot-and-mouth disease virus (FMDv) in farm settings								
Reg. type	EPA Reg No	Product name	Manufacturer	Active ingredient(s)	Concentration (product/water)	Contact time	Registered use sites according to NPIRS (Must confirm with container label)	EPA-approved label
FIFRA section 18	N/A	Various	Various	Citric acid	3% citric acid	15 min-nonporous 30 min-porous	Hard, nonporous and porous food and nonfood surfaces including, but not limited to, the following: any Federal, State, or private indoor or outdoor use site, such as: agricultural and non-agricultural equipment and facilities; transportation equipment and facilities; quarantine equipment and facilities; laboratory equipment and facilities; and footwear/personal protective equipment associated with the above use sites.	https://www.aphis.usda.gov/animal_health/emergency_management/downloads/CitricAcidexemptionlabel.pdf
FIFRA section 18	N/A	Various	Various	Sodium hypochlorite	3% (3,000 ppm) sodium hypochlorite	15 min-nonporous 30 min-porous	Any porous and nonporous surfaces at any Federal, State, or private indoor or outdoor use sites, including but not limited to, agricultural equipment and facilities; transportation equipment and facilities; quarantine equipment and facilities; laboratory equipment and facilities; and footwear/personal protective equipment associated with the above use sites.	https://www.aphis.usda.gov/animal_health/emergency_management/downloads/SodHypo_FMDvA_SFvCSFv_LABEL.pdf
FIFRA section 18	84683-3	Benefect Botanical Daily Cleaner Disinfectant Spray	Cleanwell, LLC	Thymol	0.05%	15 min	USDA APHIS and its cooperators on hard nonporous surfaces inside and outside aircraft, as well as associated loading equipment including loading ramps.	https://www.aphis.usda.gov/animal_health/emergency_management/downloads/benefect-fmdvasfv-label.pdf

*Product label approved for use against FMDv has alternate brand name, INTERVention Farm Animal Care Disinfectant Cleaner & Deodorizer