



SAFETY DATA SHEET

according to 29 CFR 1910.1200 and GHS

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SureKill® Advanced Insecticide Products VAP-5™

Revision 1
Revision date 2019-09-23

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	SureKill® Advanced Insecticide Products VAP-5™
Product code	0744010, 0746010

1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Use	[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); [PC8] Biocidal products (e.g. Disinfectants, pest control);
Description	Insecticide. Restricted Use Pesticide: For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's Certification.

1.3. Details of the supplier of the safety data sheet

Company	Neogen Corporation
Address	620 Leshler Place Lansing MI 48912 USA
Web	www.neogen.com
Telephone	517-372-9200/800-234-5333
Email	SDS@neogen.com

1.4. Emergency telephone number

	24 hours: Medical: 1-800-498-5743 (U.S. and Canada) or 1-651-523-0318 (international) Spill/CHEMTREC: 1-800-424-9300 (U.S. and Canada) or 1-703-527-3887 (international)
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Further information

Manufactured By:	Chem-Tech Ltd. 1006 Business Highway 5 Pleasantville, IA 50225 U.S.A. Chem-Tech Ltd. is a wholly-owned subsidiary of Neogen Corporation.
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture


2.1.2. Classification - GHS	Acute Tox. 3: H301; Acute Tox. 3: H311; Skin Sens. 1: H317; Acute Tox. 2: H330; Carc. 2: H351; Aquatic Acute 1: H400;
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2.2. Label elements

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2.2. Label elements

Hazard pictograms	
Signal Word	Danger
Hazard Statement	Acute Tox. 3: H301 - Toxic if swallowed. Acute Tox. 3: H311 - Toxic in contact with skin. Skin Sens. 1: H317 - May cause an allergic skin reaction. Acute Tox. 2: H330 - Fatal if inhaled. Carc. 2: H351 - Suspected of causing cancer . Aquatic Acute 1: H400 - Very toxic to aquatic life.
Precautionary Statement: Prevention	P202 - Do not handle until all safety precautions have been read and understood. P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P264 - Wash thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P272 - Contaminated work clothing should not be allowed out of the workplace. P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P284 - [In case of inadequate ventilation] wear respiratory protection.
Precautionary Statement: Response	P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor/ . P302+P352 - IF ON SKIN: Wash with plenty of water/ . P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P310 - Immediately call a POISON CENTER/doctor/ . P330 - Rinse mouth. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
Precautionary Statement: Storage	P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P405 - Store locked up.
Precautionary Statement: Disposal	P501 - Dispose of contents/container to an approved hazardous/special waste disposal facility in accordance with local and national regulations, Follow label instructions

2.3. Other hazards

Other hazards	Combustible liquid. Potential for aspiration if swallowed. Read the entire label and follow all use directions, restrictions, and precautions.
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SECTION 3: Composition/information on ingredients

3.2. Mixtures

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
Aromatic 150		64742-94-5			90 - 100%	Flam. Liq. 4: H227; Carc. 2: H351;
Dichlorvos (ISO) (Dichlorvos (DDVP))	015-019-00-X	62-73-7	200-547-7		1 - 10%	Acute Tox. 2: H330; Acute Tox. 3: H311; Acute Tox. 3: H301; Skin Sens. 1: H317; Aquatic Acute 1: H400;

Description

Concentrations listed are not product specifications.

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Further information

Full text of Hazard Statements listed in this Section is provided in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air. If breathing is difficult give oxygen. If breathing stops, provide artificial respiration. Seek medical attention if irritation or symptoms persist.
Eye contact	Rinse immediately with plenty of water. Contact lenses should be removed. Seek medical attention if irritation or symptoms persist.
Skin contact	Remove contaminated clothing. Wash with soap and water. Seek medical attention if irritation or symptoms persist.
Ingestion	Do not induce vomiting unless told to do so by the poison control center or doctor. Rinse mouth thoroughly. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation	MAY BE FATAL IF INHALED. May cause dizziness and headache. May cause irritation to respiratory system.
Eye contact	May cause irritation to eyes.
Skin contact	Toxic in contact with skin. May cause irritation to skin. May cause dermatitis.
Ingestion	Toxic if swallowed. Potential for aspiration if swallowed. Ingestion may cause nausea and vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

	Remove the affected person from the source of contamination immediately. Transfer to hospital if there are burns or symptoms of poisoning. Seek medical attention if irritation or symptoms persist. If medical advice is needed, have product container or label at hand.
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Further information

	Refer to product label for FIFRA-required First Aid directions.
NOTE TO PHYSICIAN OR VETERINARIAN	Probable mucosal damage may contraindicate the use of gastric lavage. Contains petroleum distillates. Vomiting may cause aspiration pneumonia. Atropine is the specific therapeutic antagonist of choice against parasympathetic nervous stimulation. Morphine is contraindicated.

SECTION 5: Firefighting measures

5.1. Extinguishing media

	Use extinguishing media appropriate to the surrounding fire conditions. Do NOT use water jet.
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5.2. Special hazards arising from the substance or mixture

	Combustible liquid. Insoluble in water. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do not allow runoff water to enter sewers or drains.
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5.3. Advice for firefighters

	Do not breathe dust or vapor. Wear: Self-contained breathing apparatus.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

	In the case of cleanup following a spill, wear protective clothing and appropriate equipment to prevent exposure of skin and eyes and to prevent ingestion or inhalation. Ensure adequate ventilation of the working area. Avoid prolonged or repeated exposure.
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6.2. Environmental precautions

	Prevent further spillage if safe. Clean spillage area thoroughly with plenty of water. Do not flush
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6.2. Environmental precautions

into surface water. Do not let product contaminate subsoil.

6.3. Methods and material for containment and cleaning up

Collect spillage. Contact a licensed waste disposal company. Clean spillage area thoroughly with plenty of water. Do not contaminate water by cleaning of equipment or disposal of wastes.

6.4. Reference to other sections

See Section(s) 2, 8, and 13 for further information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Adopt best Manual Handling considerations when handling, carrying and dispensing. Avoid contact with eyes. Do not eat, drink or smoke in areas where this product is used or stored. Ensure adequate ventilation of the working area. Do not contaminate water by cleaning of equipment or disposal of wastes. Read the entire label and follow all use directions, restrictions, and precautions. Use as appropriate: Protective clothing.

7.2. Conditions for safe storage, including any incompatibilities

Combustible liquid. Do not use or store near heat or open flame. Store in correctly labelled containers. Storage area should be equipped to handle an accidental spill. Do not contaminate water, food, or feed by storage or disposal. Follow label instructions.

7.3. Specific end use(s)

See Section(s) 1.2 for further information.

Further information

Refer to product label for FIFRA-required Storage and Disposal directions.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limit Values

Dichlorvos (ISO) (Dichlorvos (DDVP))	ACGIH TLV TWA: 0.1 mg/m ³ (IFV)	ACGIH TLV STEL: -
	Notations: Skin; SEN; A4; BEI A	OSHA PEL 8hr TWA ppm: -
	OSHA PEL 8hr TWA mg m3: 1	Skin Designation: X
	NIOSH REL 10hr TWA ppm: NIOSH REL 15 min ST ppm:	NIOSH REL 10hr TWA mg m3: NIOSH REL 15 min ST mg m3:

8.2. Exposure controls



Appropriate engineering controls

Ensure adequate ventilation of the working area. Storage area should be equipped to handle an accidental spill.

Individual protection measures

Use as appropriate: Protective equipment.

Eye / face protection

Wear: Approved safety goggles, or, Face shield.

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8.2. Exposure controls

Skin protection - Hand protection	Wear suitable gloves. Wash the outside of gloves before removing them. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
Skin protection - Other	All handlers (including applicators) must wear long-sleeved shirt and long pants, and shoes plus socks.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Occupational exposure controls	Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects. Protect clothing from contact with the product. Provide chemical shower. Provide eye wash station.

Further information

	Refer to product label for additional PPE requirements and recommendations. Follow label instructions.
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State	Liquid
Color	Clear/Yellow
Odor	Characteristic
Odor threshold	No data available
pH	No data available
Melting point	No data available
Freezing Point	No data available
Boiling point	No data available
Flash point	63 °C
Evaporation rate	No data available
Flammability limits	Not applicable.
Vapor pressure	No data available
Vapor density	No data available
Relative density	0.81
Partition coefficient	No data available
Autoignition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Solubility	Insoluble in water

9.2. Other information

VOC (Volatile organic compounds)	85.08 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

	Stable under normal conditions.
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10.2. Chemical stability

	Stable under normal conditions.
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10.3. Possibility of hazardous reactions

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10.3. Possibility of hazardous reactions

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4. Conditions to avoid

Keep away from sources of ignition - No smoking.

10.5. Incompatible materials

Combustible materials. Oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	MAY BE FATAL IF INHALED. Toxic in contact with skin and if swallowed.
Skin corrosion/irritation	May cause irritation to skin.
Serious eye damage/irritation	May cause irritation to eyes.
Respiratory or skin sensitization	May cause allergic reactions in susceptible people. May cause sensitization by skin contact. May cause dermatitis.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	Carcinogen category 2. Listed by the International Agency for Research on Cancer (IARC) as a Group 2 substance: suspected of being a human carcinogen. Not listed in the National Toxicology Program (NTP) 14th Report on Carcinogens. Not listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values. Not listed in the OSHA standard 1910.1003 Carcinogens.
Reproductive toxicity	No teratogenic effects reported.
STOT-single exposure	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT-repeated exposure	Components(s) may cause damage to human organs based on animal data.
Aspiration hazard	Potential for aspiration if swallowed.
Repeated or prolonged exposure	Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects. Avoid prolonged or repeated exposure. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible.

11.1.2. Mixtures

See Section(s) 3 for further information.

11.1.3. Hazard Information

See Section(s) 2 and 3 for further information.

11.1.4. Toxicological information

Dichlorvos (ISO)	Dermal Rat LD50: 107 male/75 female Inhalation Rat LC50/4 h: 199	Oral Rat LD50: 80 male/56 female
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11.1.5. Hazard Class

See Section(s) 2 and 14 for further information.

11.1.6. Classification Criteria

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11.1.6. Classification Criteria

Based on the Globally Harmonized System (GHS) considerations for the classification of mixtures. See Section 15 for regulatory citations.

11.1.7. Information on likely routes of exposure

Eye contact. Ingestion. Inhalation. Skin contact.

11.1.8. Symptoms related to the physical, chemical and toxicological characteristics

See Section(s) 4.2 for further information.

11.1.9. Delayed and immediate effects as well as chronic effects from short and long-term exposure

See Section(s) 4.2 for further information.

11.1.10. Interactive effects

No data available.

11.1.11. Absence of specific data

<1% of this mixture consists of ingredients of unknown acute toxicity.

11.1.12. Mixture versus substance information

See Section(s) 3 for further information.

11.1.13. Other information

No data available.

SECTION 12: Ecological information

12.2. Persistence and degradability

No data is available on this product.

12.3. Bioaccumulative potential

No data is available on this product.

Partition coefficient

SureKill® Advanced Insecticide Products VAP-5™ No data available

Dichlorvos (ISO) 3.84 log P

12.4. Mobility in soil

No data is available on this product.

12.5. Results of PBT and vPvB assessment

No data is available on this product.

12.6. Other adverse effects

This pesticide is toxic to aquatic organisms, including fish and invertebrates. Do not apply directly to or near water. Drift and run-off may be hazardous to fish in water adjacent to treated area. Do not contaminate water when disposing of equipment, washwater, or rinsate. See Directions for Use on the product label for additional precautions and requirements.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of as special waste in compliance with local and national regulations. Follow label instructions.

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Disposal methods

Do not contaminate water by cleaning of equipment or disposal of wastes. Do not flush into surface water. Dispose of in compliance with all local and national regulations.

Disposal of packaging

Nonrefillable container. Do not reuse or refill this container.
If empty: Do not reuse this container. Place in trash or offer for recycling, if available.
If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

Further information

Refer to product label for FIFRA-required Storage and Disposal directions.

SECTION 14: Transport information

Hazard pictograms



14.1. UN number

UN2902

14.2. UN proper shipping name

PESTICIDE, LIQUID, TOXIC, N.O.S. (Dichlorvos)

14.3. Transport hazard class(es)

DOT	6.1
Subsidiary risk	-
IMDG	6.1
Subsidiary risk	-
IATA	6.1
Subsidiary risk	-

14.4. Packing group

Packing group II

14.5. Environmental hazards

Environmental hazards	No
Marine pollutant	No

DOT

Hazard ID	60
Tunnel Category	(D/E)

IMDG

EmS Code F-A S-A

IATA

Packing Instruction (Cargo)	662
Maximum quantity	60 L

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IATA

Maximum quantity 5 L

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulations	Hazard Communication Standard: 29 Code of Federal Regulations 1910.1200: Occupational Safety and Health Standards: Z: Toxic and Hazardous Substances: Hazard Communication.
Chemical Inventories/Right-to-Know Lists:	Toxic Substances Control Act (TSCA): All ingredients listed or exempt. Massachusetts Right-to-Know Hazardous Substance List: Dichlorvos. New Jersey Worker and Community Right to Know Act: Dichlorvos. Pennsylvania Right to Know Law: Phosphoric acid, 2,2-dichloroethenyl dimethyl ester. Rhode Island Right-to-Know General Law: Dichlorvos (skin). **California residents please note**. WARNING: This product can expose you to chemicals, including dichlorvos, CAS No. 62-73-7, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov .

Inventories

Ingredient	TSCA	MA	SARA313	CALPROP65	CWA307	CAA112	CWA311	SARA302	SARA304
Dichlorvos (ISO) (Phosphoric acid, 2,2-dichloroethenyl dimethyl ester)	Y	Y	Y 0.1	Y	N	Y	Y	Y 1,000	Y 10

Further information

FIFRA	This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.
FIFRA Signal Word	DANGER.
FIFRA Warning	Keep out of reach of children. Hazards to humans and domestic animals. Corrosive. Causes irreversible eye damage. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Do not contaminate food products by direct contact with liquid.

SECTION 16: Other information

Other information

Revision	This document differs from the previous version in the following areas:. 1 - Description. 1 - Product Use. 1 - Manufactured By:. 2 - Other hazards. 2 - 2.1. Classification of the substance or mixture. 2 - 2.1.2. Classification - GHS. 2 - Hazard pictograms. 2 - Signal Word. 2 - Precautionary Statement: Prevention. 2 - Precautionary Statement: Response. 2 - Precautionary Statement: Storage. 2 - Precautionary Statement: Disposal. 4 - Inhalation. 4 - Skin contact.
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Other information

4 - Ingestion.
 4 - NOTE TO PHYSICIAN OR VETERINARIAN.
 5 - 5.1. Extinguishing media.
 5 - 5.2. Special hazards arising from the substance or mixture.
 5 - 5.3. Advice for firefighters.
 6 - 6.1. Personal precautions, protective equipment and emergency procedures.
 6 - 6.3. Methods and material for containment and cleaning up.
 7 - 7.2. Conditions for safe storage, including any incompatibilities.
 8 - Appropriate engineering controls.
 8 - Skin protection - Hand protection.
 8 - Eye / face protection.
 8 - Skin protection - Other.
 9 - 9.1. Information on basic physical and chemical properties (Relative density).
 9 - 9.1. Information on basic physical and chemical properties (Flash point).
 9 - 9.2. Other information (VOC (Volatile organic compounds)).
 9 - 9.2. Other information (Product Subcategory).
 10 - 10.4. Conditions to avoid.
 10 - 10.5. Incompatible materials.
 11 - Acute toxicity.
 11 - Respiratory or skin sensitization.
 11 - Repeated or prolonged exposure.
 11 - Carcinogenicity.
 11 - STOT-repeated exposure.
 11 - Aspiration hazard.
 13 - 13.1. Waste treatment methods.
 15 - Hazard Statements.
 15 - Safety phrases.
 15 - FIFRA Signal Word.
 15 - FIFRA Warning.
 15 - Chemical Inventories/Right-to-Know Lists:.
 16 - Maximum content of VOC.

Acronyms

ADR/RID: European Agreements Concerning the International Carriage of Dangerous Goods by Rail (RID) and by Road (ADR).
 CAS No.: Chemical Abstracts Service.
 GHS: Globally Harmonized System.
 HCS 2012: Hazard Communication Standard (2012 revision).
 IATA: International Air Transport Association.
 ICAO: International Civil Aviation Organization.
 IMDG: International Maritime Dangerous Goods.
 LD: Lethal dose.
 OEL: Occupational exposure limit.
 OSHA: U.S. Occupational Safety and Health Administration.
 PEL: Permissible Exposure Limit.
 REACH: Registration, Evaluation, Authorization, and Restriction of Chemicals.
 SVHC: Substance of very high concern.
 US DOT: United States Department of Transportation.
 VOC: Volatile Organic Compound.
 WEL: Workplace Exposure Limit.

Text of Hazard Statements in Section 3

Flam. Liq. 4: H227 - Combustible liquid.
 Carc. 2: H351 - Suspected of causing cancer .
 Acute Tox. 3: H301 - Toxic if swallowed.
 Acute Tox. 3: H311 - Toxic in contact with skin.

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Other information

	<p>Skin Sens. 1: H317 - May cause an allergic skin reaction. Acute Tox. 2: H330 - Fatal if inhaled. Aquatic Acute 1: H400 - Very toxic to aquatic life.</p>
Maximum content of VOC	85.08 %.

Further information

	<p>DISCLAIMER: The information and recommendations set forth herein ("Information") are presented in good faith and believed to be correct as of the date issued. No representation is made regarding the completeness or accuracy of the Information. Further, because of the many factors that affect the use of this product, the Information is supplied upon the condition that the person(s) receiving it will make their own determination regarding its suitability for their own unique purpose(s), prior to use.</p> <p>Except as expressly stated herein, NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, COURSE OF PERFORMANCE, USAGE OF TRADE, OR RESULTS TO BE OBTAINED BY USE OF THIS PRODUCT are made with respect to this product or use of this product. The product covered is furnished "as is" and only subject to the warranties herein provided, no liability is assumed resulting from the use of this product.</p>
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