

**1. Identification**

<b>Product identifier</b>	<b>NUVAN Fog 5%™</b>	
<b>Other means of identification</b>		
<b>SDS number</b>	392	
<b>Product registration number</b>	5481-220	
<b>Synonyms</b>	Alco® DDVP 5% Emulsifiable Concentrate™	
<b>Recommended use</b>	Organophosphate insecticide.	
<b>Recommended restrictions</b>	This is a Restricted Use Pesticide and is for use by licensed applicators only. See product label for restrictions. Keep out of the Reach of Children!	
<b>EPA Registration number</b>	EPA: 5481-220	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
<b>Company Name</b>	AMVAC Chemical Corporation	
<b>Address</b>	4695 MacArthur Court Suite 1200 Newport Beach, CA 92660 United States	
<b>Telephone</b>		
<b>AMVAC Chemical Corp</b>	949-260-1200	
<b>AMVAC Chemical Corp</b>	949-260-6270(FAX)	
<b>Product Use</b>	888-462-6822	
<b>Website</b>	www.amvac.com	
<b>E-mail</b>	CustServ@amvac.com	
<b>Emergency phone number</b>		
<b>Medical</b>	888-681-4261	
<b>CHEMTREC® (USA+Canada)</b>	800-424-9300	
<b>CHEMTREC® (Outside USA)</b>	+1-703-527-3887	

**2. Hazard(s) identification**

<b>Physical hazards</b>	Flammable liquids	Category 4
<b>Health hazards</b>	Acute toxicity, oral	Category 4
	Serious eye damage/eye irritation	Category 1
	Carcinogenicity	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Aspiration hazard	Category 1
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1
<b>OSHA defined hazards</b>	Not classified.	

**Label elements**



**Signal word**                      Danger

<b>Hazard statement</b>	Combustible liquid. Harmful if swallowed. Causes serious eye damage. Suspected of causing cancer. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
<b>Precautionary statement</b>	
<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Keep away from flames and hot surfaces. - No smoking. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing mist/vapors. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wash thoroughly after handling.
<b>Response</b>	If swallowed: Immediately call a poison center/doctor. Rinse mouth. Do NOT induce vomiting. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If exposed or concerned: Get medical advice/attention. In case of fire: Use appropriate media to extinguish. Collect spillage.
<b>Storage</b>	Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	This 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 in section 15. The pesticide label also includes other important information, including directions for use.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Dichlorvos (DDVP)	Dimethyl 2,2-dichlorovinylphosphate	62-73-7	5
Aromatic solvent		64742-94-5	80 - 90

#### Constituents

Chemical name	Common name and synonyms	CAS number	%
1,2,4-Trimethylbenzene		95-63-6	< 2
Naphthalene		91-20-3	< 9

**Composition comments** Occupational Exposure Limits for constituents are listed in Section 8.

### 4. First-aid measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If person is not breathing, call 911 or an ambulance, then give artificial respiration. Call a poison center or doctor/physician for further treatment advice.
<b>Skin contact</b>	Remove contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center for treatment advice.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eyes and lids with water. Get medical attention immediately.
<b>Ingestion</b>	Call a physician or poison control center immediately. Do not induce vomiting without advice from poison control center. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

**Most important symptoms/effects, acute and delayed**

This product is a severe Cholinesterase Inhibitor. Preexisting skin or respiratory disorders may be aggravated by exposure to components of this product. Preexisting conditions which lower cholinesterase levels increase vulnerability to cholinesterase depression. These include: (for plasma) chronic alcoholism; malnutrition; dermatomyositis; existing toxicity from exposure to carbon disulfide, benzalkonium salts, organic mercury compounds, ciguatoxins or solanines; and (for RBC) hemolytic anemia.

Acute cholinesterase depression may be evidenced by headache, nausea, vomiting, diarrhea, abdominal cramps, excessive sweating, salivation and tearing, constricted pupils, blurred vision, tightness in chest, weakness, muscle twitching and confusion; in extreme cases unconsciousness, convulsions, severe respiratory depression and death may occur.

Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause drowsiness or dizziness. Convulsions. Headache. Nausea, vomiting. Diarrhea. Aspiration may cause pulmonary edema and pneumonitis.

**Indication of immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

This product is an Organophosphate (OP) Insecticide. Do not handle the patient without the following protective equipment in place: chemical resistant gloves and apron (preferably nitrile). Remove contaminated clothing and do not reuse without thorough cleaning with detergent and hot water. Do not wait for laboratory confirmation to treat patients with strong clinical evidence of poisoning. In the USA and other countries, contact your local or national poison control center for more information.

Establish airway and oxygenation. IV Atropine sulfate is the antidote of choice against parasympathetic nervous stimulation. If there are signs of parasympathetic stimulation, Atropine sulfate should be injected at 10 minutes intervals in doses of 1 to 2 milligrams until complete atropinization has occurred. Pralidoxime chloride (2-PAM chloride) may also be used as an effective antidote in addition to and while maintaining full atropinization. In adults, an initial dose of 1 gram of 2-PAM should be injected, preferably as an infusion, in 250 cc of saline over a 15 to 20 minute period. If this is not practical, 2-PAM may be administered slowly by intravenous injection as a 5% solution in water over not less than 2 minutes. After about an hour, a second dose of 1 gram of 2-PAM will be indicated if muscle weakness has not been relieved. For infants and children, the dose of 2-PAM is 0.25 grams. Avoid morphine, aminophylline, phenothiazine, reserpine, furosemide and ethacrynic acid. Clear chest by postural drainage. Oxygen administration may be necessary. Observe patient continuously for 48 hours. Repeated exposure to cholinesterase inhibitors may without warning cause prolonged susceptibility very small doses of any cholinesterase inhibitor. Allow no further exposure until time for cholinesterase regeneration has been attained as determined by a blood test. Bathe and shampoo contaminated skin and hair. If ingested, empty stomach; activated charcoal is useful to further to further limit absorption. If victim is alert, Syrup of Ipecac (2 tablespoons in adults, 1 tablespoon in small children) is indicated. If symptoms such as loss of gag reflex, convulsions, or unconsciousness occur before emesis, gastric lavage should be considered following intubation with a cuffed endotracheal tube.

**General information**

If exposed or concerned: Get medical advice/attention.

This product is a cholinesterase inhibitor. A physician should be contacted in all cases of exposure to the technical and its formulations. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Do Not handle the patient without the following protective equipment in place: chemical resistant gloves and apron (preferably nitrile). Remove contaminated clothing and do not reuse without thorough cleaning with detergent and hot water.

**5. Fire-fighting measures**

**Suitable extinguishing media**

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

**Unsuitable extinguishing media**

Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical**

The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed. Due to the solvent, this product can accumulate static charges which can cause an incendiary electrical discharge. Even empty containers may contain sufficient residues to cause an explosion.

**Special protective equipment and precautions for firefighters**

Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Clean all clothing before reuse. Shower with soap and water after contact with this product.

**Fire fighting equipment/instructions**

Immediately evacuate personnel to safe areas. In case of fire and/or explosion do not breathe fumes. Keep upwind. Move containers from fire area if you can do so without risk.

**Specific methods**

Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**

Combustible liquid.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Ensure adequate ventilation. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not allow this material to drain into sewers/water supplies. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

### Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Siphon the majority of the liquid into drums for use or disposal, depending on the circumstances. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Decontaminate the area and equipment with dilute alkali or ammonia (less than 5%) and detergent.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

### Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

### Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Provide adequate ventilation. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Keep away from open flames, hot surfaces and sources of ignition. Observe good industrial hygiene practices. Do not get this material in contact with eyes. Do not taste or swallow. Avoid breathing mist/vapors. Avoid prolonged exposure. When using, do not eat, drink or smoke. Keep product away from food, drink, cosmetics, and tobacco products. Avoid release to the environment. Wash thoroughly and change clothes after handling. Wash clothes separately; do not wash heavily contaminated clothing.

### Conditions for safe storage, including any incompatibilities

Store in tightly closed container. Store locked up. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Keep away from heat, sparks and open flame. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

#### US. OSHA Table Z-1 Permissible Exposure Limits (PEL) for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Dichlorvos (DDVP) (CAS 62-73-7)	PEL	1 mg/m <sup>3</sup>

Constituents	Type	Value
Naphthalene (CAS 91-20-3)	PEL	50 mg/m <sup>3</sup> 10 ppm

#### US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value	Form
Dichlorvos (DDVP) (CAS 62-73-7)	TWA	0.1 mg/m <sup>3</sup>	Inhalable fraction and vapor.
Constituents	Type	Value	
1,2,4-Trimethylbenzene (CAS 95-63-6)	TWA	10 ppm	
Naphthalene (CAS 91-20-3)	TWA	10 ppm	

#### NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended

Components	Type	Value
Dichlorvos (DDVP) (CAS 62-73-7)	IDLH	100 mg/m <sup>3</sup>

**NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended**

Constituents	Type	Value
Naphthalene (CAS 91-20-3)	IDLH	0.9 % 250 ppm

**US. NIOSH: Pocket Guide to Chemical Hazards Recommended Exposure Limits (REL)**

Components	Type	Value
Aromatic solvent (CAS 64742-94-5)	TWA	100 mg/m3
Dichlorvos (DDVP) (CAS 62-73-7)	TWA	1 mg/m3
Constituents	Type	Value
1,2,4-Trimethylbenzene (CAS 95-63-6)	TWA	125 mg/m3 25 ppm
Naphthalene (CAS 91-20-3)	STEL	75 mg/m3 15 ppm
	TWA	50 mg/m3 10 ppm

**Biological limit values****ACGIH Biological Exposure Indices (BEI)**

Components	Value	Determinant	Specimen	Sampling Time
Dichlorvos (DDVP) (CAS 62-73-7)	70 %	Acetylcholinest erase activity	Reduction from individual baseline activity in red blood cells	*
	60 %	Butyrylcholines terase activity	Serum or Plasma	*

\* - For sampling details, please see the source document.

**Exposure guidelines****US - California OELs: Skin designation**

Dichlorvos (DDVP) (CAS 62-73-7) Can be absorbed through the skin.  
Naphthalene (CAS 91-20-3) Can be absorbed through the skin.

**US - Minnesota Haz Subs: Skin designation applies**

Dichlorvos (DDVP) (CAS 62-73-7) Skin designation applies.

**US - Tennessee OELs: Skin designation**

Dichlorvos (DDVP) (CAS 62-73-7) Can be absorbed through the skin.

**US ACGIH Threshold Limit Values: Skin designation**

Dichlorvos (DDVP) (CAS 62-73-7) Danger of cutaneous absorption  
Naphthalene (CAS 91-20-3) Danger of cutaneous absorption

**US NIOSH Pocket Guide to Chemical Hazards: Skin designation**

Dichlorvos (DDVP) (CAS 62-73-7) Can be absorbed through the skin.

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Dichlorvos (DDVP) (CAS 62-73-7) Can be absorbed through the skin.

**Appropriate engineering controls**

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear chemical goggles. Face shield is recommended.

**Skin protection**

**Hand protection** Wear appropriate chemical resistant gloves. Suitable gloves are listed on the label.

**Other** Long-sleeved shirt and long pants or coveralls, socks and closed toe shoes are required. Chemical resistant apron. (when mixing, loading, or cleaning equipment or spills).

<b>Respiratory protection</b>	When respiratory protection is required, or concentrations may exceed the PEL, use an approved air-purifying respirator equipped with organic vapor cartridges or canisters. It is recommended that the canisters be changed whenever breakthrough occurs or eight (8) hours of use has occurred, whichever comes first. For emergency and other conditions where the exposure limit may be greatly exceeded, use an approved positive-pressure, self-contained breathing apparatus or positive-airline with auxiliary self-contained air supply.
<b>Thermal hazards</b>	Not applicable.
<b>General hygiene considerations</b>	Observe any medical surveillance requirements. When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

<b>Appearance</b>	Clear, pale amber liquid.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Clear, pale amber.
<b>Odor</b>	Aromatic solvent.
<b>Odor threshold</b>	Not available.
<b>pH</b>	4 - 5.5 (1% emulsion)
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	326 °F (163.3 °C) (solvent).
<b>Flash point</b>	147 °F (63.9 °C) Tag Closed Cup
<b>Evaporation rate</b>	0.12 (compared to –Butyl acetate = 1.0).
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Explosive limit - lower (%)</b>	1.8 % (77 °F (25 °C))
<b>Explosive limit - upper (%)</b>	11.7 % (77 °F (25 °C))
<b>Vapor pressure</b>	3.8 mm Hg (Solvent).
<b>Vapor density</b>	Heavier than air.
<b>Relative density</b>	0.91
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Emulsifies.
<b>Solubility (solvents)</b>	Soluble in aromatic solvents.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	830 °F (443 °C) (approximate).
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	The data presented in this section are typical values and should not be construed as a specification.
<b>Bulk density</b>	7.6 lb/gal
<b>Explosive properties</b>	Not explosive.
<b>Flammability class</b>	Combustible IIIA
<b>Oxidizing properties</b>	Not oxidizing.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong acids. Strong bases. Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known. Emits hazardous fumes and smoke of unknown composition when heated to decomposition or burned.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	May cause drowsiness or dizziness. Headache. Nausea, vomiting.
<b>Skin contact</b>	Not a skin irritant or skin sensitizer.
<b>Eye contact</b>	Causes serious eye damage.
<b>Ingestion</b>	Harmful if swallowed. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

### Symptoms related to the physical, chemical and toxicological characteristics

Acute cholinesterase depression may be evidenced by headache, nausea, vomiting, diarrhea, abdominal cramps, excessive sweating, salivation and tearing, constricted pupils, blurred vision, tightness in chest, weakness, muscle twitching and confusion; in extreme cases, unconsciousness, convulsions, severe respiratory depression and death may occur.

Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

May cause drowsiness or dizziness. Convulsions. Headache. Nausea, vomiting. Diarrhea. Aspiration may cause pulmonary edema and pneumonitis.

### Information on toxicological effects

**Acute toxicity** Harmful if swallowed.

Product	Species	Test Results
NUVAN Fog 5%™		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 5050 mg/kg
<b>Inhalation</b>		
<i>Mist</i>		
LC50	Rat	> 2.06 mg/kg, 4 Hours
<b>Oral</b>		
LD50	female rat	1030 mg/kg

**Skin corrosion/irritation** Non-irritating (rabbit).

**Serious eye damage/eye irritation** Causes serious eye damage.

#### Eye

NUVAN Fog 5%™

Result: Extremely irritating

### Respiratory or skin sensitization

#### ACGIH sensitization

Dichlorvos (DDVP), inhalable fraction and vapor (CAS 62-73-7)

Dermal sensitization

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** Not classified.

**Germ cell mutagenicity** Not classified.

**Carcinogenicity** Suspected of causing cancer.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Dichlorvos (DDVP) (CAS 62-73-7)

2B Possibly carcinogenic to humans.

Naphthalene (CAS 91-20-3)

2B Possibly carcinogenic to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

#### US. National Toxicology Program (NTP) Report on Carcinogens

Naphthalene (CAS 91-20-3)

Known To Be Human Carcinogen.

Reasonably Anticipated to be a Human Carcinogen.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** May cause drowsiness or dizziness. Potential neurotoxicity as an organophosphate.

**Specific target organ toxicity - repeated exposure** Potential neurotoxicity as an organophosphate.

<b>Aspiration hazard</b>	May be fatal if swallowed and enters airways. If aspirated into lungs during swallowing or vomiting, may cause chemical pneumonia, pulmonary injury or death.
<b>Chronic effects</b>	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

## 12. Ecological information

<b>Ecotoxicity</b>	Very toxic to aquatic life with long lasting effects. This product is toxic to fish, birds, and other wildlife. Keep out of any body of water. Do not contaminate water when disposing of equipment washwaters or wastes.
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Components	Species	Test Results
Dichlorvos (DDVP) (CAS 62-73-7)		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	EC50 Water flea ( <i>Daphnia pulex</i> )	>= 0 - <= 0.0001 mg/l, 48 hours
Fish	LC50 Cutthroat trout ( <i>Oncorhynchus clarki</i> )	>= 0.141 - <= 0.321 mg/l, 96 hours

<b>Persistence and degradability</b>	No data is available on the degradability of any ingredients in the mixture.
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### Bioaccumulative potential

#### Partition coefficient n-octanol / water (log Kow)

Dichlorvos (DDVP)	1.43
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<b>Mobility in soil</b>	No data available.
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<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
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## 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
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<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
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<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
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<b>Waste from residues / unused products</b>	Dispose of in accordance with all applicable regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
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<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Triple rinse (or equivalent).
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## 14. Transport information

### DOT

<b>UN number</b>	UN3082
<b>UN proper shipping name</b>	Environmentally hazardous substance, liquid, n.o.s. (Dichlorvos RQ = 10 LBS), MARINE POLLUTANT
<b>Transport hazard class(es)</b>	
<b>Class</b>	9
<b>Subsidiary hazard</b>	-
<b>Label(s)</b>	9
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	8, 146, 173, 335, IB3, T4, TP1, TP29
<b>Packaging exceptions</b>	155
<b>Packaging non bulk</b>	203
<b>Packaging bulk</b>	241

### IATA

<b>UN number</b>	UN3082
<b>UN proper shipping name</b>	Environmentally hazardous substance, liquid, n.o.s. (Dichlorvos)
<b>Transport hazard class(es)</b>	
<b>Class</b>	9
<b>Subsidiary hazard</b>	-
<b>Packing group</b>	III



**Environmental hazards** Yes  
**ERG Code** 9L  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
**Other information**

**Passenger and cargo aircraft** Allowed with restrictions.

**Cargo aircraft only** Allowed with restrictions.

Read safety instructions, SDS and emergency procedures before handling.

#### IMDG

**UN number** UN3082

**UN proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dichlorvos), MARINE POLLUTANT

**Transport hazard class(es)**

**Class** 9

**Subsidiary hazard** -

**Packing group** III

**Environmental hazards**

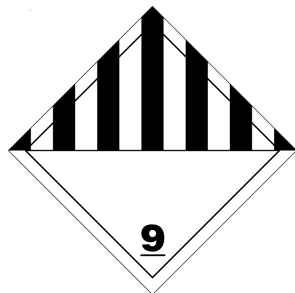
**Marine pollutant** Yes

**EmS** F-A, S-F

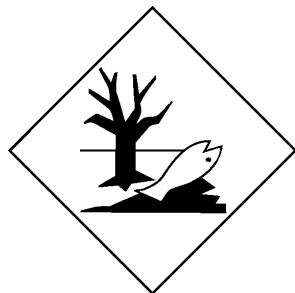
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

#### DOT; IATA; IMDG



#### Marine pollutant



#### General information

DOT Regulated Severe Marine Pollutant. IMDG Regulated Marine Pollutant.

This product is not regulated when shipped by highway or rail in non-bulk packaging of less than 25 gallons. When shipped by air, vessel or in bulk packaging this product is regulated according to the data shown.

## 15. Regulatory information

### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

This product is registered under EPA/FIFRA Regulations as a RESTRICTED USE PESTICIDE. It is a violation of Federal Law to use this product in any manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

This 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.

#### HAZARD TO HUMANS AND DOMESTIC ANIMALS.

##### DANGER

Corrosive. Causes irreversible eye damage. Harmful if swallowed. Do not get in eyes or on clothing. Avoid contact with the skin.

#### ENVIRONMENTAL HAZARDS

This product is toxic to fish, birds, and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water when disposing of equipment washwater or rinsate. This pesticide is highly toxic to bees exposed to direct treatment or to residues remaining on treated area. Do not apply when bees are visiting ornamentals, weeds, or other vegetation blooming in the treatment area. Applications should be timed to provide the maximum possible interval between treatment and the next period of bee activity.

#### PHYSICAL OR CHEMICAL HAZARDS

Combustible. Do not use or store near heat or open flame.

### Toxic Substances Control Act (TSCA)

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Aromatic solvent (CAS 64742-94-5)	Listed.
Dichlorvos (DDVP) (CAS 62-73-7)	Listed.
Naphthalene (CAS 91-20-3)	Listed.

### SARA 304 Emergency release notification

Phosphoric acid, 2-dichloroethenyl dimethyl ester;	10 LBS
Dichlorvos (CAS 62-73-7)	

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
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Dichlorvos (DDVP)	62-73-7	10	1000		
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#### SARA 311/312 Hazardous chemical

<b>Classified hazard categories</b>	Flammable (gases, aerosols, liquids, or solids) Acute toxicity (any route of exposure) Serious eye damage or eye irritation Carcinogenicity Specific target organ toxicity (single or repeated exposure) Aspiration hazard
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#### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Dichlorvos (DDVP)	62-73-7	5

## Other federal regulations

### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Dichlorvos (DDVP) (CAS 62-73-7)

Naphthalene (CAS 91-20-3)

### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Contains component(s) regulated under the Safe Drinking Water Act.

## US state regulations

### California Proposition 65



**WARNING:** This product can expose you to chemicals including Dichlorvos (DDVP), which are known to the State of California to cause cancer, and Ethylene Glycol, which are known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

Issue date	Oct-22-2015
Revision date	Oct-27-2023
Version #	4.0
HMIS® ratings	Health: 3* Flammability: 2 Physical hazard: 0
NFPA ratings	Health: 3 Flammability: 2 Instability: 0

### Disclaimer

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### Revision information

This document has undergone significant changes and should be reviewed in its entirety.