

# SAFETY DATA SHEET

## 1. Identification

**Product identifier** NUVAN® Fog 4EC™

**Other means of identification**

**SDS number** 288\_v2.0

**Synonym(s)** Alco® DDVP 4E Emulsifiable Concentrate™

**Recommended use** Organophosphate insecticide.

**Recommended restrictions** This is a Restricted Use Pesticide and is for use by licensed applicators only.

**EPA Registration number** EPA: 5481-204

### Manufacturer/Importer/Supplier/Distributor information

#### Manufacturer

**Company name** AMVAC Chemical Corporation

**Address** 4100 E Washington Blvd  
Los Angeles, CA 90023 USA

**Telephone** AMVAC Chemical Corp 323-264-3910  
AMVAC Chemical Corp 323-268-1028 (FAX)

**Website** www.Amvac-Chemical.com

**E-mail** CustServ@Amvac-Chemical.com

**Emergency phone number** Medical 888-681-4261  
CHEMTREC® (USA+Canada) 800-424-9300  
Product Use 888-462-6822  
CHEMTREC® (Outside USA) +1-703-527-3887

## 2. Hazard(s) identification

**Physical hazards** Flammable liquids Category 4

**Health hazards** Acute toxicity, oral Category 3  
Acute toxicity, dermal Category 4  
Acute toxicity, inhalation Category 3  
Serious eye damage/eye irritation Category 2A  
Carcinogenicity Category 2

**Environmental hazards** Not classified.

**OSHA defined hazards** Not classified.

#### Label elements



**Signal word** Danger

**Hazard statement** Combustible liquid.  
Toxic if swallowed.  
Harmful in contact with skin.  
Toxic if inhaled.  
Causes serious eye irritation.  
Suspected of causing cancer.

## Precautionary statement

### Prevention

Do not handle until all safety precautions have been read and understood.  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Avoid breathing mist/vapors/spray.  
Do not eat, drink or smoke when using this product.  
Wash thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Wear respiratory protection.

### Response

In case of fire: Use appropriate media to extinguish.  
If swallowed: Immediately call a poison center/doctor. Rinse mouth.  
If on skin: Wash with plenty of water. Take off contaminated clothing and wash before reuse.  
If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
Collect spillage.

### Storage

Store in a well-ventilated place. Keep container tightly closed.  
Store locked up.

### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

### Hazard(s) not otherwise classified (HNOC)

Very toxic to aquatic life.  
Very toxic to aquatic life with long lasting effects.

### Supplemental information

None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
DDVP (DICHLORVOS)		62-73-7	41.4
1,2,3-Trimethyl benzene		526-73-8	1 - < 3
1,4-Diethylbenzene		105-05-5	1 - < 3
Naphthalene		91-20-3	1 - < 3
1,2, 4-Trimethylbenzene		95-63-6	< 1
1,3-Diethyl benzene		141-93-5	< 1
2-Methylnaphthalene		91-57-6	< 1

## 4. First-aid measures

### Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately.

### Skin contact

Get medical advice/attention if you feel unwell. Wash off immediately with plenty of water for at least 15 minutes. Wash contaminated clothing before reuse.

### Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. If eye irritation persists: Get medical advice/attention. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eyes and lids with water. If there will be a delay in getting medical attention, rinse the eyes an additional 15 minutes.

### Ingestion

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If victim is conscious, administer an 8 oz. glass of water containing 2 tbsp. activated charcoal. Have person lie on their left side to slow down absorption of the ingested material. Never give anything by mouth to a victim who is unconscious or is having convulsions.

**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. Product may cause slight but temporary irritation to the eyes and may cause irritation of the skin.

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

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

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. Dispose of heavily contaminated clothing, including shoes, as a hazardous waste. 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. Keep victim under observation. Keep victim warm. Symptoms may be delayed.

**General information**

IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. 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. Dispose of heavily contaminated clothing, including shoes, as a hazardous waste. This product is a Cholinesterase Inhibitor. A physician should be contacted in all cases of exposure to the technical and its formulations.

**5. Fire-fighting measures**

**Suitable extinguishing media**

Water spray. 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**

Firefighters should wear full protective clothing including self contained breathing apparatus. Clean all clothing before reuse. Severely contaminated clothing cannot be adequately decontaminated, and must be disposed as a hazardous waste. 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. Wear appropriate protective equipment and clothing during clean-up. Do not breathe vapors or spray mist. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. Do not allow this material to drain into sewers/water supplies.

### Methods and materials for containment and cleaning up

Stop the flow of material, if this is without risk, to prevent entry into waterways, sewer, basements or confined areas. Dike the spilled material, where this is possible to prevent contamination of local water sources. Siphon the majority of the liquid into drums for use or disposal, depending on the circumstances. Absorb in vermiculite, dry sand or earth and place into containers. Clean surface thoroughly to remove residual contamination. Decontaminate the area and equipment with dilute alkali or ammonia (less than 5%) and detergent.

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

## 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. Keep away from open flames, hot surfaces and sources of ignition. Do not breathe vapors or spray mist. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices. Keep product away from food, drink, cosmetics, and tobacco products. Wash thoroughly and change clothes after handling. Wash clothes separately; do not wash heavily contaminated clothing. Dispose of heavily contaminated clothing as hazardous waste.

### Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. 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

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

Components	Type	Value
DDVP (DICHLORVOS) (CAS 62-73-7)	PEL	1 mg/m <sup>3</sup>
Naphthalene (CAS 91-20-3)	PEL	50 mg/m <sup>3</sup> 10 ppm

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
1,2, 4-Trimethylbenzene (CAS 95-63-6)	TWA	25 ppm	
1,2,3-Trimethyl benzene (CAS 526-73-8)	TWA	25 ppm	
2-Methylnaphthalene (CAS 91-57-6)	TWA	0.5 ppm	
DDVP (DICHLORVOS) (CAS 62-73-7)	TWA	0.1 mg/m <sup>3</sup>	Inhalable fraction and vapor.
Naphthalene (CAS 91-20-3)	TWA	10 ppm	

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
1,2, 4-Trimethylbenzene (CAS 95-63-6)	TWA	125 mg/m <sup>3</sup> 25 ppm
1,2,3-Trimethyl benzene (CAS 526-73-8)	TWA	125 mg/m <sup>3</sup> 25 ppm
DDVP (DICHLORVOS) (CAS 62-73-7)	TWA	1 mg/m <sup>3</sup>
Naphthalene (CAS 91-20-3)	STEL	75 mg/m <sup>3</sup>

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
		15 ppm
	TWA	50 mg/m <sup>3</sup>
		10 ppm

**US. Workplace Environmental Exposure Level (WEEL) Guides**

Components	Type	Value
1,3-Diethyl benzene (CAS 141-93-5)	TWA	5 ppm
1,4-Diethylbenzene (CAS 105-05-5)	TWA	5 ppm

**Biological limit values** No biological exposure limits noted for the ingredient(s).

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

DDVP (DICHLORVOS) (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**

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

**US - Tennessee OELs: Skin designation**

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

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

2-Methylnaphthalene (CAS 91-57-6) Can be absorbed through the skin.  
DDVP (DICHLORVOS) (CAS 62-73-7) Can be absorbed through the skin.  
Naphthalene (CAS 91-20-3) Can be absorbed through the skin.

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

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

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

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

**Appropriate engineering controls** Good general ventilation (typically 10 air changes per hour) 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 safety glasses with side shields (or goggles).

**Skin protection**

**Hand protection** Wear appropriate chemical resistant gloves. Gloves of nitrile rubber, PVA or Viton are recommended.

**Other** Wear appropriate chemical resistant clothing (see label).

**Respiratory protection** 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.

**Thermal hazards** Not applicable.

**General hygiene considerations** 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**

**Appearance** Clear, pale amber liquid.

**Physical state** Liquid.

**Form** Liquid.

**Color** Clear, pale amber.

**Odor** Aromatic solvent

**Odor threshold** Not available.

<b>pH</b>	3 - 4.5 (1% emulsion)
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	326 °F (163 °C) (solvent).
<b>Flash point</b>	147 °F (64 °C) Tag Closed Cup
<b>Evaporation rate</b>	0.1 (compared to –Butyl acetate = 1.0).
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	1.8 % (77 °F (25 °C))
<b>Flammability limit - upper (%)</b>	11.7 % (77 °F (25 °C))
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	3.80E+00 mm Hg (Solvent).
<b>Vapor density</b>	Heavier than air.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Emulsifies.
<b>Partition coefficient temp.</b>	38.4 @ 25 C
<b>Auto-ignition temperature</b>	830 °F (443.33 °C) (approximate).
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Bulk density</b>	8.93 lb/gal
<b>Flammability class</b>	Combustible IIIA
<b>Specific gravity</b>	1.07

## 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 oxidizing agents. Strong bases.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known. This product may emit hazardous fumes of hydrogen chloride, carbon oxides, and unidentified organic compounds when it is heated excessively or burned. WEAR SELF-CONTAINED BREATHING APPARATUS when these conditions are present.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Toxic if inhaled.
<b>Skin contact</b>	Harmful in contact with skin.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	Toxic if swallowed.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

### Information on toxicological effects

<b>Acute toxicity</b>	Toxic if swallowed. Harmful in contact with skin. Toxic if inhaled. Causes severe eye irritation.
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Product	Species	Test Results
NUVAN Fog 4EC		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	2475 mg/kg 1392 mg/kg female
<b>Inhalation</b>		
LC50	Rat	1.04 mg/l 0.74 mg/l female
<b>Oral</b>		
LD50	Rat	55 mg/kg female
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.	
<b>Eye</b>		
NUVAN Fog 4EC	Result: Extremely irritating	
<b>Respiratory or skin sensitization</b>		
<b>ACGIH sensitization</b>		
DDVP (DICHLORVOS) (CAS 62-73-7)	Dermal sensitization	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.	
<b>Skin sensitization</b>	Possible skin sensitizer.	
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% show any germ cell mutation.	
<b>Carcinogenicity</b>	Suspected carcinogen.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
DDVP (DICHLORVOS) (CAS 62-73-7)	2B Possibly carcinogenic to humans.	
Naphthalene (CAS 91-20-3)	2B Possibly carcinogenic to humans.	
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>		
Not regulated.		
<b>US. National Toxicology Program (NTP) Report on Carcinogens</b>		
Naphthalene (CAS 91-20-3)	Reasonably Anticipated to be a Human Carcinogen.	
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.	
<b>Specific target organ toxicity - single exposure</b>	Potential neurotoxicity as an organophosphate.	
<b>Specific target organ toxicity - repeated exposure</b>	Potential neurotoxicity as an organophosphate.	
<b>Aspiration hazard</b>	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

**Ecotoxicity** 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.

Components	Species	Test Results
Naphthalene (CAS 91-20-3)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) 1.09 - 3.4 mg/l, 48 hours
Fish	LC50	Pink salmon (Oncorhynchus gorboscha) 1.11 - 1.68 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential**

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

Naphthalene

3.3

**Mobility in soil**

No data available.

**Other adverse effects**

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

**13. Disposal considerations****Disposal instructions**

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.

**Local disposal regulations**

Dispose in accordance with all applicable regulations.

**Hazardous waste code**

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products**

Dispose of container and residues 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 methods/information).

**Contaminated packaging**

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).

**14. Transport information****DOT****UN number**

UN3018

**UN proper shipping name**

Organophosphorus pesticides, liquid, toxic (Dichlorvos RQ = 10), MARINE POLLUTANT

**Transport hazard class(es)****Class**

6.1(PGIII)

**Subsidiary risk**

-

**Label(s)**

6.1

**Packing group**

III

**Environmental hazards****Marine pollutant**

Yes

**Special precautions for user**

Read safety instructions, SDS and emergency procedures before handling.

**Special provisions**

IB3, N76, T7, TP2, TP28

**Packaging exceptions**

153

**Packaging non bulk**

203

**Packaging bulk**

241

**IATA****UN number**

UN3018

**UN proper shipping name**

Organophosphorus pesticides, liquid, toxic (Dichlorvos)

**Transport hazard class(es)****Class**

6.1(PGIII)

**Subsidiary risk**

-

**Label(s)**

6.1

**Packing group**

III

**Environmental hazards**

Yes

**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.

**IMDG****UN number**

UN3018

**UN proper shipping name**

Organophosphorus pesticides, liquid, toxic (Dichlorvos), MARINE POLLUTANT

**Transport hazard class(es)****Class**

6.1(PGIII)

**Subsidiary risk**

-

**Label(s)**

6.1

**Packing group**

III

**Environmental hazards**

**Marine pollutant**

Yes

**EmS**

Not available.

**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 Severe Marine Pollutant.

## 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.

#### DANGER

Corrosive. Causes irreversible eye damage. Do not get in eyes, on skin, or on clothing. May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Avoid breathing vapor or spray mist

#### ENVIRONMENTAL HAZARDS

This product is toxic to fish, birds, and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present (except for application to cranberry bogs) or to intertidal areas below the mean high water mark. Do not allow this material to drift onto neighboring crops or noncrop areas or use in a manner or at a time other than in accordance with label directions because animal, plant or crop injury, illegal residues, or other undesirable results may occur. 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.

#### PHYSICAL OR CHEMICAL HAZARDS

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

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

Not regulated.

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

DDVP (DICHLORVOS) (CAS 62-73-7) Listed.  
Naphthalene (CAS 91-20-3) Listed.

#### SARA 304 Emergency release notification

DDVP (DICHLORVOS) (CAS 62-73-7) 10 LBS

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

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

**Hazard categories**  
Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity	Threshold planning quantity	Threshold planning quantity, lower value	Threshold planning quantity, upper value
DDVP (DICHLORVOS)	62-73-7	10	1000 lbs		

**SARA 311/312 Hazardous chemical** No

#### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
DDVP (DICHLORVOS)	62-73-7	41.4
Naphthalene	91-20-3	1 - < 3

#### Other federal regulations

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

2-Methylnaphthalene (CAS 91-57-6)  
DDVP (DICHLORVOS) (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)** Not regulated.**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**1,2, 4-Trimethylbenzene (CAS 95-63-6)  
2-Methylnaphthalene (CAS 91-57-6)  
Naphthalene (CAS 91-20-3)**US. Massachusetts RTK - Substance List**1,2, 4-Trimethylbenzene (CAS 95-63-6)  
1,2,3-Trimethyl benzene (CAS 526-73-8)  
1,3-Diethyl benzene (CAS 141-93-5)  
1,4-Diethylbenzene (CAS 105-05-5)  
DDVP (DICHLORVOS) (CAS 62-73-7)  
Naphthalene (CAS 91-20-3)**US. New Jersey Worker and Community Right-to-Know Act**1,2, 4-Trimethylbenzene (CAS 95-63-6)  
1,2,3-Trimethyl benzene (CAS 526-73-8)  
1,3-Diethyl benzene (CAS 141-93-5)  
1,4-Diethylbenzene (CAS 105-05-5)  
2-Methylnaphthalene (CAS 91-57-6)  
DDVP (DICHLORVOS) (CAS 62-73-7)  
Naphthalene (CAS 91-20-3)**US. Pennsylvania Worker and Community Right-to-Know Law**1,2, 4-Trimethylbenzene (CAS 95-63-6)  
1,2,3-Trimethyl benzene (CAS 526-73-8)  
1,3-Diethyl benzene (CAS 141-93-5)  
1,4-Diethylbenzene (CAS 105-05-5)  
2-Methylnaphthalene (CAS 91-57-6)  
DDVP (DICHLORVOS) (CAS 62-73-7)  
Naphthalene (CAS 91-20-3)**US. Rhode Island RTK**1,2, 4-Trimethylbenzene (CAS 95-63-6)  
DDVP (DICHLORVOS) (CAS 62-73-7)  
Naphthalene (CAS 91-20-3)**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer.

**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**DDVP (DICHLORVOS) (CAS 62-73-7) Listed: January 1, 1989  
Naphthalene (CAS 91-20-3) Listed: April 19, 2002**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
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 10-22-2015  
Revision date 08-16-2016

**References**

ACGIH®: American Conference of Governmental Industrial Hygienists  
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act  
EPA: Environmental Protection Agency  
FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act  
IARC: International Agency for Research on Cancer  
NTP: National Toxicology Program  
OSHA: Occupational Safety and Health Agency  
SARA: Superfund Amendments and Reauthorization Act  
TSCA: Toxic Substances Control Act  
DOT: Department of Transportation  
IMDG: International Maritime Dangerous Goods  
IATA: International Air Transport Association

**Version #**

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**Further information**

Not available.

**HMIS® ratings**

Health: 2\*  
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.