



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Dylox® 6.2 Granular Insecticide

**Other means of identification**

**SDS number** 610

**Product registration number** 5481-641

**Recommended use** Insecticide

**Recommended restrictions** See product label for restrictions.  
Do not handle without appropriate PPE (see section 8).

**EPA Registration number** EPA: 5481-641

### Manufacturer/Importer/Supplier/Distributor information

#### Manufacturer

**Company name** AMVAC Chemical Corporation

**Address** 4695 MacArthur Court  
Suite 1200  
Newport Beach, CA 92660

**Telephone** AMVAC Chemical Corp 949-260-1200  
AMVAC Chemical Corp 949-260-6270(FAX)

**Website** [www.Amvac-Chemical.com](http://www.Amvac-Chemical.com)

**E-mail** [CustServ@Amvac-Chemical.com](mailto:CustServ@Amvac-Chemical.com)

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

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Acute toxicity, inhalation Category 4  
Serious eye damage/eye irritation Category 2B

**Environmental hazards** Hazardous to the aquatic environment, acute hazard Category 1  
Hazardous to the aquatic environment, long-term hazard Category 1

**OSHA defined hazards** Not classified.

#### Label elements



**Signal word** Warning

**Hazard statement** Harmful if inhaled.  
Causes eye irritation.  
Very toxic to aquatic life.  
Very toxic to aquatic life with long lasting effects.

#### Precautionary statement

**Prevention** Avoid breathing dust.  
Wash face, hands and any exposed skin thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Avoid release to the environment.

<b>Response</b>	If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If eye irritation persists: Get medical advice/attention.
<b>Storage</b>	Store away from incompatible materials.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	This product contains a cholinesterase inhibitor.
<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	%
Trichlorfon	O,O-Dimethyl(1-hydroxy-2,2,2-trichloroethyl)phosphonate Chlorofos Dipterex DYLOX Metrifonate	52-68-6	6.20

### 4. First-aid measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a poison center or doctor/physician if you feel unwell.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. 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. Repeated exposures to small doses of organophosphates may lower the cholinesterase to levels where the above symptoms of acute overexposure are observed.

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

This product contains an Organophosphate (OP) pesticide. 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 minute 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 to 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 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. Symptoms may be delayed.

**General information**

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment. This product contains a Cholinesterase Inhibitor. A physician should be contacted in all cases of exposure to this product.

**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**

During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions**

Use water spray to cool unopened containers.

**Specific methods**

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

**General fire hazards**

No unusual fire or explosion hazards noted.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust. 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.

**Methods and materials for containment and cleaning up**

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Sweep up or vacuum up spillage and collect in suitable container for disposal. Scrub contaminated area with detergent and bleach solution. Following product recovery, flush area with water. Contaminated soil may have to be removed and disposed. For waste disposal, see section 13 of the SDS.

**Environmental precautions**

Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

### Precautions for safe handling

Handle and open container with care. Avoid breathing dust. Avoid contact with eyes. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Remove soiled clothing immediately and clean thoroughly before using again.

### Conditions for safe storage, including any incompatibilities

Store in tightly closed container. Store in a well-ventilated place. Store locked up. Store away from incompatible materials (see Section 10 of the SDS). Keep away from food, drink and animal feedings. Keep out of the reach of children.

## 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. ACGIH Threshold Limit Values

Components	Type	Value	Form
Trichlorfon (CAS 52-68-6)	TWA	1 mg/m <sup>3</sup>	Inhalable fraction.

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Provide eyewash station.

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

#### Eye/face protection

Wear safety glasses with side shields (or goggles). Chemical goggles are recommended.

#### Skin protection

##### Hand protection

Wear appropriate chemical resistant gloves. Nitrile gloves are recommended.

##### Other

Long-sleeved shirt and long pants or coveralls, socks and closed toe shoes are required.

#### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

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

#### Physical state

Liquid.

#### Form

Granular. Solid.

#### Color

Tan

### Odor

Sweet

### Odor threshold

Not available.

### pH

ca. 4.6 (1%)

### Melting point/freezing point

Not available.

### Initial boiling point and boiling range

Not available.

### Flash point

Not available.

### Evaporation rate

Not available.

### Flammability (solid, gas)

Not available.

### Upper/lower flammability or explosive limits

#### Flammability limit - lower (%)

Not available.

#### Flammability limit - upper (%)

Not available.

#### Explosive limit - lower (%)

Not available.

#### Explosive limit - upper (%)

Not available.

### Vapor pressure

Not available.

### Vapor density

Not available.

<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Bulk density</b>	30 - 35 lb/ft <sup>3</sup>
<b>Explosive properties</b>	Not explosive.
<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>	Exposure to moisture. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Decomposition may form Chloral, Dimethyl hydrogen phosphite, Carbon monoxide, and Oxides of phosphorus.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Harmful by inhalation.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Causes mild eye irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

### Information on toxicological effects

**Acute toxicity** Harmful if inhaled. Causes mild eye irritation.

Product	Species	Test Results
Trichlorfon 6.2 Granules		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 5000 mg/kg (combined)
<b>Inhalation</b>		
<i>Dust</i>		
LC50	Rat	> 2 mg/l, 4 h (combined)
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg (female)

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

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

### Respiratory or skin sensitization

<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	Not a sensitizer.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

## IARC Monographs. Overall Evaluation of Carcinogenicity

Trichlorfon (CAS 52-68-6)

3 Not classifiable as to carcinogenicity to humans.

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

Not listed.

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

Not listed.

<b>Reproductive toxicity</b>	Active ingredient is not considered a reproductive toxicant at non-maternally toxic dose levels.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	No specific target organ toxicity is expected after repeated exposure.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Prolonged inhalation may be harmful.

## 12. Ecological information

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

Components	Species	Test Results
Trichlorfon (CAS 52-68-6)		
<b>Aquatic</b>		
Crustacea	EC50 Water flea ( <i>Daphnia magna</i> )	0.0001 - 0.0002 mg/l, 48 hours
Fish	LC50 Cutthroat trout ( <i>Oncorhynchus clarki</i> )	0.31 - 0.454 mg/l, 96 hours

**Persistence and degradability** Active ingredient is rapidly biodegradable.

**Bioaccumulative potential** Trichlorfon: Bioconcentration factor (BCF) 0.41; Does not bioaccumulate.

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

Trichlorfon 0.51

**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. 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 instructions).

**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.

## 14. Transport information

### DOT

**UN number** UN3077

**UN proper shipping name** Environmentally hazardous substances, solid, n.o.s. (Trichlorfon RQ = 1612 lb (product)), MARINE POLLUTANT

### Transport hazard class(es)

**Class** 9

**Subsidiary risk** -

**Label(s)** 9

**Packing group** III

### Environmental hazards

**Marine pollutant** Yes

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

**Special provisions** 8, 146, 335, A112, B54, IB8, IP3, N20, T1, TP33

**Packaging exceptions** 155

Packaging non bulk 213  
Packaging bulk 240

**IATA**

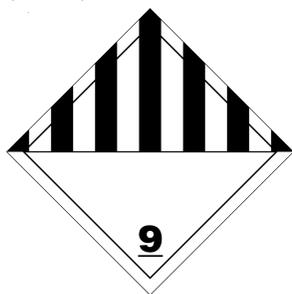
UN number UN3077  
UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (Trichlorfon Mixture)  
Transport hazard class(es)  
Class 9  
Subsidiary risk -  
Label(s) 9  
Packing group III  
Environmental hazards Yes  
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.  
Read safety instructions, SDS and emergency procedures before handling.

**IMDG**

UN number UN3077  
UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (Trichlorfon Mixture), MARINE POLLUTANT  
Transport hazard class(es)  
Class 9  
Subsidiary risk -  
Label(s) 9  
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 applicable.

**DOT; IATA; IMDG**



**Marine pollutant**



**General information**

DOT Regulated Marine Pollutant. IMDG Regulated Marine Pollutant.  
This product is not regulated when shipped by highway, rail, or air in non-bulk packaging (maximum capacity of 400 kg (880 lb) or less). When shipped by vessel or in bulk packaging this product is regulated according to the data shown.

Freight Classification: INSECTICIDES OR FUNGICIDES, N.O.I., OTHER THAN POISON

## 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. 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.

##### CAUTION!

Harmful if swallowed. Causes moderate eye irritation. Do not take internally. Do not breathe dust. Avoid contact with eyes, skin, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### ENVIRONMENTAL HAZARDS

This product is toxic to fish, birds, and wildlife. Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not apply when turf grass areas are water-logged or the soil is saturated with water (i.e. will not allow penetration into the root zone of the plant). Avoid run-off or puddling of irrigation water following application.

### 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)

Trichlorfon (CAS 52-68-6)

Listed.

#### SARA 304 Emergency release notification

Not regulated.

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

Not listed.

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

#### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**Classified hazard categories** Acute toxicity (any route of exposure)  
Serious eye damage or eye irritation

#### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Trichlorfon	52-68-6	6.20

### Other federal regulations

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

Not regulated.

#### 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

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. 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)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*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** Jul-12-2019

**Revision date** Jul-12-2019

**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 #** 1.0

**HMIS® ratings** Health: 2  
Flammability: 0  
Physical hazard: 0

**NFPA ratings** Health: 2  
Flammability: 0  
Instability: 0

**Disclaimer** This information is provided for the limited guidance to the user. While AMVAC believes that the information is, as of the date hereof, reliable, it is the user's responsibility to determine the suitability of the information for its purposes. The user is advised not to construe the information as absolutely complete since additional information may be necessary or desirable when particular, exceptional, or variable conditions or circumstances exist (like combinations with other materials), or because of applicable regulations. No express or implied warranty of merchantability or fitness for a particular purpose or otherwise is made hereunder with respect to the information or the product to which the information relates.

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