1. Identification

Product identifier: BIDRIN® 8

Recommended use: Organophosphate insecticide.

Recommended restrictions: This is a Restricted Use Pesticide and is for use by licensed applicators only. Keep out of the Reach of Children!

Product registration number: 5481-448

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 3

Health hazards:
- Acute toxicity, oral Category 1
- Acute toxicity, dermal Category 3
- Acute toxicity, inhalation Category 2
- Serious eye damage/eye irritation Category 2B
- Sensitization, skin Category 1

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: Danger

Hazard statement: Fatal if swallowed. Toxic in contact with skin. Fatal if inhaled. Causes eye irritation. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.

Precautionary statement:
Prevention
- Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not breathe vapor. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing. Wear protective gloves/eye protection/face protection. Wear respiratory protection.
**Response**

If swallowed: Immediately call a poison center/doctor. If on skin: Wash with plenty of water. 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. Immediately call a poison center/doctor. Specific treatment is urgent (see this label). Rinse mouth. If eye irritation persists: Get medical advice/attention. Take off immediately all contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage.

**Storage**


**Disposal**

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

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

None known.

**Supplemental information**

United States Environmental Protection Agency Labeling Requirements: 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.

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS.**

DANGER: Fatal if swallowed, inhaled or absorbed through the skin. Do not get in eyes, on skin, or on clothing. Do not breathe spray mist. Causes moderate eye irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

**ENVIRONMENTAL HAZARDS**

This pesticide is highly toxic to birds and mammals. Runoff may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Keep out of lakes, ponds, and streams. Do not contaminate water when disposing of equipment washwaters or rinsate. This product is toxic to bees exposed to direct treatment on blooming corps or weeds. See the label for more complete information. Do not apply if bees are visiting the treatment area. Do not spray border areas. Keep border areas within 25 feet of field free of bird feed and shelter. Birds feeding on treated area may be killed. do not use whenever large flocks of birds are in the vicinity or when they are noted feeding in or around fields.

**PHYSICAL OR CHEMICAL HAZARDS**

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

**3. Composition/information on ingredients**

**Mixtures**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicrotophos</td>
<td></td>
<td>141-66-2</td>
<td>82</td>
</tr>
<tr>
<td>Isopropanol</td>
<td></td>
<td>67-63-0</td>
<td></td>
</tr>
</tbody>
</table>

**4. First-aid measures**

**Inhalation**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Call a physician or poison control center immediately.

**Skin contact**

Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. 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. Continue rinsing. Call a physician or poison control center immediately.

**Ingestion**

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Have person sip a glass of water if able to swallow. Do not induce vomiting without advice from poison control center. Never give anything by mouth to a victim who is unconscious or is having convulsions. 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.
This is a cholinesterase inhibiting organophosphorous pesticide. 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.

This product is a 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.

Repeated exposures to small doses of organophosphates may lower the cholinesterase to levels where the above symptoms of acute overexposure are observed.

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. Prolidoxime 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 limit absorption. If atropinization has occurred. Pralidoxime chloride (2-PAM chloride) may also be used as an immediate medical attention and special treatment needed

Indication of immediate medical attention and special treatment needed

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. Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation.

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
Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed. Hydrogen chloride, carbon oxides and unidentified organic compounds may be formed when it is heated excessively or burned. Do not breathe gas, fumes, or vapor.

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

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

General fire hazards
Flammable liquid and vapor.
6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not get in eyes, on skin, on clothing. Do not breathe mist. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spills 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). Take precautionary measures against static discharge. Use only non-sparking tools. 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. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.
Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

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
Keep away from food, drink and animal feedstuffs. Keep out of the reach of children. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe the mist or vapor. Do not use in areas without adequate ventilation. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. When using, do not eat, drink or smoke. Handle and open container with care. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. 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

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropanol (CAS 67-63-0)</td>
<td>PEL</td>
<td>980 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>400 ppm</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicrotophos (CAS 141-66-2)</td>
<td>TWA</td>
<td>0.05 mg/m³</td>
<td>Inhalable fraction and vapor.</td>
</tr>
<tr>
<td>Isopropanol (CAS 67-63-0)</td>
<td>STEL</td>
<td>400 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>200 ppm</td>
<td></td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicrotophos (CAS 141-66-2)</td>
<td>TWA</td>
<td>0.25 mg/m³</td>
</tr>
<tr>
<td>Isopropanol (CAS 67-63-0)</td>
<td>STEL</td>
<td>1225 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>500 ppm</td>
</tr>
</tbody>
</table>
US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>980 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>400 ppm</td>
</tr>
</tbody>
</table>

Biological limit values

<table>
<thead>
<tr>
<th>ACGIH Biological Exposure Indices</th>
<th>Value</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isopropanol (CAS 67-63-0)</td>
<td>40 mg/l</td>
<td>Acetone</td>
<td>Urine</td>
<td>*</td>
</tr>
</tbody>
</table>

* For sampling details, please see the source document.

Exposure guidelines

**US - California OELs: Skin designation**
Dicrotophos (CAS 141-66-2) Can be absorbed through the skin.

**US - Minnesota Haz Subs: Skin designation applies**
Dicrotophos (CAS 141-66-2) Skin designation applies.

**US - Tennessee OELs: Skin designation**
Dicrotophos (CAS 141-66-2) Can be absorbed through the skin.

**US ACGIH Threshold Limit Values: Skin designation**
Dicrotophos (CAS 141-66-2) Can be absorbed through the skin.

**US NIOSH Pocket Guide to Chemical Hazards: Skin designation**
Dicrotophos (CAS 141-66-2) 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. Suitable gloves can be recommended by the glove supplier.

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

**Respiratory protection**
Wear positive pressure self-contained breathing apparatus (SCBA).

**Thermal hazards**
Wear appropriate thermal protective clothing, when necessary.

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**

**Physical state**
Liquid.

**Form**
Liquid.

**Color**
Not available.

**Odor**
Not available.

**Odor threshold**
Not available.

**pH**
Not available.

**Melting point/freezing point**
Not available.

**Initial boiling point and boiling range**
Not available.

**Flash point**
100 - 109 °F (38 - 43 °C)

**Evaporation rate**
Not available.

**Flammability (solid, gas)**
Not applicable.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower**
Not available.
### Flammability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability limit - upper (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive limit - lower (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive limit - upper (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>2.13E-04 hPa estimated</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td></td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other information</td>
<td></td>
</tr>
<tr>
<td>Bulk density</td>
<td>9.9 lb/gal @ 20 C</td>
</tr>
<tr>
<td>Density</td>
<td>1.19 g/ml @ 20 C</td>
</tr>
<tr>
<td>Flammability class</td>
<td>Flammable IC estimated</td>
</tr>
</tbody>
</table>

### Stability and reactivity

#### Reactivity
- The product is stable and non-reactive under normal conditions of use, storage and transport.

#### Chemical stability
- Material is stable under normal conditions.

#### Possibility of hazardous reactions
- Hazardous polymerization does not occur.

#### Conditions to avoid
- Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

#### Incompatible materials
- Strong oxidizing agents.

#### Hazardous decomposition products
- 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.

### Toxicological information

#### Information on likely routes of exposure

<table>
<thead>
<tr>
<th>Route</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Fatal if inhaled.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Fatal in contact with skin.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>Causes eye irritation.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Fatal if swallowed.</td>
</tr>
</tbody>
</table>

#### 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
- Fatal if inhaled. Fatal in contact with skin. Fatal if swallowed.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicrotophos (CAS 141-66-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Rabbit</td>
<td>876 mg/kg (males)</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td>487 mg/kg (females) (Tox Category II)</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>&gt; 0.059 mg/l (Tox Category II)</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>11 mg/kg (males)(Tox Category I)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 mg/kg (females)</td>
</tr>
</tbody>
</table>

#### Skin corrosion/irritation
- Not a skin irritant.
Serious eye damage/eye irritation
Causes eye irritation.

Respiratory or skin sensitization

Respiratory sensitization
Not a respiratory sensitizer.

Skin sensitization
Skin sensitizer.

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

Carcinogenicity
Dicrotophos has shown an increased incidence of thyroid follicular cell adenomas in male mice receiving 50 ppm dicrotophos, the highest dose level tested in a two year study. EPA's Cancer Classification o for Dicrotophos states only 'Suggestive Evidence of Carcinogenicity but Not Sufficient to Assess Human Carcinogenic Potential.' None of the following have classified Dicrotophos as carcinogenic: IARC, NTP, OSHA, or ACGIH.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Reproductive toxicity
Dicrotophos has shown effects on reproductive performance, pup survival and pup growth but only at dose levels (5 to 25 ppm) that also showed paternal toxicity in a rat multigeneration study.

Specific target organ toxicity - single exposure
Not classified.

Specific target organ toxicity - repeated exposure
Not classified.

Aspiration hazard
May be harmful if swallowed and enters airways.

Chronic effects
Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity
Very toxic to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicrotophos (CAS 141-66-2) Aquatic</td>
<td>Crustacea</td>
<td>EC50</td>
</tr>
<tr>
<td>Dicrotophos (CAS 141-66-2) Aquatic</td>
<td>Fish</td>
<td>LC50</td>
</tr>
<tr>
<td>Isopropanol (CAS 67-63-0) Aquatic</td>
<td>Fish</td>
<td>LC50</td>
</tr>
</tbody>
</table>

* 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)

<table>
<thead>
<tr>
<th>Component</th>
<th>log Kow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicrotophos</td>
<td>2.45, (E-isomer)</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>0.05</td>
</tr>
</tbody>
</table>

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 in accordance with local 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

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN3017</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>Organophosphorus pesticides, liquid, toxic, flammable, flash point not less than 23 degrees C (Dicrotophos, Isopropanol), MARINE POLLUTANT</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td>6.1(PGI, II)</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>3</td>
</tr>
<tr>
<td>Label(s)</td>
<td>6.1, 3</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td></td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>Yes</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Read safety instructions, SDS and emergency procedures before handling.</td>
</tr>
<tr>
<td>Special provisions</td>
<td>IB2, N76, T11, TP2, TP13, TP27</td>
</tr>
<tr>
<td>Packaging exceptions</td>
<td>153</td>
</tr>
<tr>
<td>Packaging non bulk</td>
<td>202</td>
</tr>
<tr>
<td>Packaging bulk</td>
<td>243</td>
</tr>
</tbody>
</table>

IATA

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN3017</th>
</tr>
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<tbody>
<tr>
<td>UN proper shipping name</td>
<td>Organophosphorus pesticides, liquid, toxic, flammable, flash point not less than 23 degrees C (Dicrotophos, Isopropanol)</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td>6.1(PGI, II)</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>3</td>
</tr>
<tr>
<td>Label(s)</td>
<td>6.1, 3</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td></td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>Yes</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Read safety instructions, SDS and emergency procedures before handling.</td>
</tr>
<tr>
<td>Other information</td>
<td></td>
</tr>
<tr>
<td>Passenger and cargo aircraft</td>
<td>Allowed.</td>
</tr>
<tr>
<td>Cargo aircraft only</td>
<td>Allowed.</td>
</tr>
</tbody>
</table>

IMDG

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN3017</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>Organophosphorus pesticides, liquid, toxic, flammable, flash point not less than 23 degrees C (Dicrotophos, Isopropanol), MARINE POLLUTANT</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td>6.1(PGI, II)</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>3</td>
</tr>
<tr>
<td>Label(s)</td>
<td>6.1, 3</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td></td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>Yes</td>
</tr>
<tr>
<td>EmS</td>
<td>Not available.</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Read safety instructions, SDS and emergency procedures before handling.</td>
</tr>
<tr>
<td>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</td>
<td>Not established.</td>
</tr>
</tbody>
</table>
General information

DOT Regulated Marine Pollutant. IMDG Regulated 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.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Isopropanol (CAS 67-63-0) Listed.

SARA 304 Emergency release notification
Dicrotophos (CAS 141-66-2) 100 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely hazardous substance

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>Reportable quantity</th>
<th>Threshold planning quantity, lower value</th>
<th>Threshold planning quantity, upper value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicrotophos</td>
<td>141-66-2</td>
<td>100</td>
<td>100 lbs</td>
<td></td>
</tr>
<tr>
<td>SARA 311/312 Hazardous chemical</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### SARA 313 (TRI reporting)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropanol</td>
<td>67-63-0</td>
<td></td>
</tr>
</tbody>
</table>

### 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)**
- 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))**
- Isopropanol (CAS 67-63-0)

**US. Massachusetts RTK - Substance List**
- Dicrotophs (CAS 141-66-2)
- Isopropanol (CAS 67-63-0)

**US. New Jersey Worker and Community Right-to-Know Act**
- Dicrotophs (CAS 141-66-2)
- Isopropanol (CAS 67-63-0)

**US. Pennsylvania Worker and Community Right-to-Know Law**
- Dicrotophs (CAS 141-66-2)
- Isopropanol (CAS 67-63-0)

**US. Rhode Island RTK**
- Dicrotophs (CAS 141-66-2)
- Isopropanol (CAS 67-63-0)

**US. California Proposition 65**
- California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

### International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>No</td>
</tr>
</tbody>
</table>

* "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**
- 05-08-2015

**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 #**
- 01

**Further information**
- Not available.

**HMIS® ratings**
- Health: 4
- Flammability: 3
- Physical hazard: 0
NFPA ratings

Health: 4
Flammability: 3
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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Revision Information

Composition / Information on Ingredients: Ingredients
Physical & Chemical Properties: Multiple Properties
Transport Information: Proper Shipping Name/Packing Group
HazReg Data: International Inventories
GHS: Classification