

# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>BIDRIN® XP11</b>
<b>Other means of identification</b>	
<b>SDS number</b>	368_v2.0
<b>Recommended use</b>	Broad-Spectrum Cotton Insecticide (contains both a pyrethroid and an organophosphate insecticide).
<b>Recommended restrictions</b>	This is a Restricted Use Pesticide and is for use by licensed applicators only. Keep out of the Reach of Children!
<b>EPA Registration number</b>	EPA: 5481-9024
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Manufacturer</b>	
<b>Company name</b>	AMVAC Chemical Corporation
<b>Address</b>	4100 E Washington Blvd Los Angeles, CA 90023 USA
<b>Telephone</b>	AMVAC Chemical Corp           323-264-3910 AMVAC Chemical Corp           323-268-1028 (FAX)
<b>Website</b>	www.Amvac-Chemical.com
<b>E-mail</b>	CustServ@Amvac-Chemical.com
<b>Emergency phone number</b>	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

<b>Physical hazards</b>	Flammable liquids	Category 4
<b>Health hazards</b>	Acute toxicity, oral	Category 2
	Acute toxicity, dermal	Category 3
	Acute toxicity, inhalation	Category 2
	Serious eye damage/eye irritation	Category 2B
	Sensitization, skin	Category 1
	Carcinogenicity	Category 2
	Specific target organ toxicity, repeated exposure	Category 1
<b>Environmental hazards</b>	Not classified.	
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Danger
<b>Hazard statement</b>	Combustible liquid. Fatal if swallowed. Fatal if inhaled. Toxic in contact with skin. Causes eye irritation. Causes damage to organs through prolonged or repeated exposure.
<b>Precautionary statement</b>	
<b>Prevention</b>	Do not breathe dust or mists. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/eye protection/face protection. Wear respiratory protection.

<b>Response</b>	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 product 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.
<b>Storage</b>	Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. 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>	Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
<b>Supplemental information</b>	None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Dicrotophos		141-66-2	43.1
Bifenthrin		82657-04-3	10.8

### 4. First-aid measures

<b>Inhalation</b>	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.
<b>Skin contact</b>	Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Wash contaminated clothing before reuse.
<b>Eye contact</b>	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.
<b>Ingestion</b>	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.
<b>Most important symptoms/effects, acute and delayed</b>	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.

**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.

**General information**

This product is a severe 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**

Heating or burning may release highly toxic vapors or fumes. Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup, which could result in container rupture. 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**

Combustible liquid.

**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 spillages cannot be contained. For personal protection, see section 8 of the SDS.

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

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. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Clean surface thoroughly to remove residual contamination.

**Environmental precautions**

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

### 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. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Dicrotophos (CAS 141-66-2)	TWA	0.05 mg/m <sup>3</sup>	Inhalable fraction and vapor.

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

Components	Type	Value
Dicrotophos (CAS 141-66-2)	TWA	0.25 mg/m <sup>3</sup>

### Biological limit values

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

### Exposure guidelines

#### 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

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

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

#### Eye/face protection

Face-shield. Wear a full-face respirator, if needed.

#### Skin protection

##### Hand protection

Wear chemical resistant gloves (preferably nitrile)

##### Other

Wear appropriate chemical resistant clothing (see label). It may provide little or no thermal protection.

#### 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 eat, drink or smoke. 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

Light yellow to dark amber liquid

#### Physical state

Liquid.

#### Form

Liquid.

#### Color

Not available.

### Odor

Mild ester

### Odor threshold

Not available.

### pH

2.7 - 2.8 (Dicrotophos, 1% in water)

### Melting point/freezing point

Not determined (mixture)

### Initial boiling point and boiling range

Not determined (mixture)

### Flash point

> 180 °F (> 82 °C) Cleveland Open Cup

### Evaporation rate

Not available.

### Flammability (solid, gas)

Not available.

## Upper/lower flammability or explosive limits

<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.

**Vapor pressure** 2.90E-03 Pa 2.2 x 10<sup>-5</sup> torr (dicrotophos)

**Vapor density** Havier than air

**Relative density** Not available.

## Solubility(ies)

**Solubility (water)** Emulsifiable

**Partition coefficient (n-octanol/water)** 6 (Bifenthrin)

E-isomer = 2.445; Z-isomer = .000481 (dicrotophos)

**Auto-ignition temperature** 347 °F (175 °C)

**Decomposition temperature** Not available.

**Viscosity** Not available.

## Other information

**Bulk density** 9.51 lb/gal

**Density** 1.21 g/cm<sup>3</sup> estimated

**Flammability class** Combustible IIIA estimated

**Specific gravity** 1.14 @ 20 °C

## 10. 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** Heat, flames and sparks. Avoid temperatures exceeding the flash point.

**Incompatible materials** Strong oxidizing agents.

**Hazardous decomposition products** No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

**Inhalation** Fatal if inhaled.

**Skin contact** Toxic in contact with skin.

**Eye contact** Causes eye irritation.

**Ingestion** Fatal if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics** 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. Product may cause slight but temporary irritation to the eyes and may cause irritation of the skin.

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.

## Information on toxicological effects

### Acute toxicity

There is currently no information available for this premix. The following information is available for the two active substances, Dicrotophos and Bifenthrin, and is included here to assist the user in determining the possible characteristics of the product. Fatal if inhaled. Fatal in contact with skin. Fatal if swallowed.

Components	Species	Test Results
Bifenthrin (CAS 82657-04-3)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2020 mg/kg (Tox Cat III).
<b>Inhalation</b>		
LC50	Rat	1.1 mg/l, 4 hours Males, (Tox Cat III).
<b>Oral</b>		
LD50	Rat	175 mg/kg (Tox Cat II)
Dicrotophos (CAS 141-66-2)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	876 mg/kg (males) 487 mg/kg (females) (Tox Category II)
<b>Inhalation</b>		
LC50	Rat	> 0.059 mg/l (Tox Category II)
<b>Oral</b>		
LD50	Rat	11 mg/kg (males)(Tox Category I) 8 mg/kg (females)
<b>Skin corrosion/irritation</b>	Causes slight skin irritation.	
<b>Serious eye damage/eye irritation</b>	Causes mild eye irritation.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	No data available due to high toxicity	
<b>Skin sensitization</b>	Skin sensitizer.	
<b>Germ cell mutagenicity</b>	No data available due to high toxicity.	
<b>Carcinogenicity</b>		
Bifenthrin has produced an increased incidence of urinary bladder tumors in male mice at the highest dose level tested. This response however was considered equivocal and not evidence of a clear compound related effect. EPA has classified Bifenthrin as a class C carcinogen, a possible human carcinogen.		
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.		
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
Not listed.		
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>		
Not regulated.		
<b>US. National Toxicology Program (NTP) Report on Carcinogens</b>		
Not listed.		
<b>Reproductive toxicity</b>	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.	
<b>Specific target organ toxicity - single exposure</b>	No specific target organ toxicity is expected after single exposure.	
<b>Specific target organ toxicity - repeated exposure</b>	Causes damage to organs through prolonged or repeated exposure (Bifenthrin).	
<b>Aspiration hazard</b>	Not an aspiration hazard.	

## 12. Ecological information

**Ecotoxicity** Very toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

Components	Species	Test Results
Bifenthrin (CAS 82657-04-3)		
<b>Aquatic</b>		
Crustacea	LC50	Water flea (Ceriodaphnia dubia) 0 - 0.0002 mg/l, 48 hours Water flea (Daphnia magna) 0.0001 - 0.0009 mg/l, 48 hours
Dicrotophos (CAS 141-66-2)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Simocephalus serrulatus) 0.21 - 0.32 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus) 2.8 mg/l, 96 hours

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

**Bioaccumulative potential** No data available for this product.

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

BIDRIN® XP11	6, (Bifenthrin)
Dicrotophos	2.45, (E-isomer)

**Mobility in soil** Not 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 product.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site according to all applicable regulations. This material and its container must be disposed of as hazardous waste. 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 all applicable local/regional/national/international 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 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** Empty containers should be taken to an approved waste handling site for recycling or disposal according to all applicable regulations. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

### DOT

<b>UN number</b>	UN2902
<b>UN proper shipping name</b>	Pesticides, liquid, toxic, n.o.s. (Dicrotophos, Bifenthrin), MARINE POLLUTANT
<b>Transport hazard class(es)</b>	
<b>Class</b>	6.1(PGI, II)
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	6.1
<b>Packing group</b>	II
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>Special precautions for user</b>	Not available.
<b>Special provisions</b>	IB2, T11, TP2, TP13, TP27
<b>Packaging exceptions</b>	153
<b>Packaging non bulk</b>	202
<b>Packaging bulk</b>	243

### IATA

<b>UN number</b>	UN2902
<b>UN proper shipping name</b>	Pesticides, liquid, toxic, n.o.s. (Dicrotophos, Bifenthrin)
<b>Transport hazard class(es)</b>	
<b>Class</b>	6.1(PGI, II)
<b>Subsidiary risk</b>	-

<b>Label(s)</b>	6.1
<b>Packing group</b>	II
<b>Environmental hazards</b>	Yes
<b>Special precautions for user</b>	Not available.
<b>Other information</b>	
<b>Passenger and cargo aircraft</b>	Allowed with restrictions.
<b>Cargo aircraft only</b>	Allowed with restrictions.

**IMDG**

<b>UN number</b>	UN2902
<b>UN proper shipping name</b>	Pesticides, liquid, toxic, n.o.s. (Dicrotophos, Bifenthrin), MARINE POLLUTANT
<b>Transport hazard class(es)</b>	
<b>Class</b>	6.1(PGI, II)
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	6.1
<b>Packing group</b>	II
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>EmS</b>	Not available.
<b>Special precautions for user</b>	Not available.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not available.

**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 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.

HAZARD TO HUMANS AND DOMESTIC ANIMALS.

DANGER: Fatal if swallowed, inhaled or absorbed through the skin. Causes skin burns and irreversible eye damage, Do not get in eyes, on skin, or on clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### ENVIRONMENTAL HAZARDS

This pesticide is highly toxic to fish, aquatic invertebrates, birds and mammals. Use with care when applying in areas adjacent to any body of water. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water, or 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 washwater or rinsate. Do not contaminate water when disposing of equipment washwater or rinsate.

### PHYSICAL OR CHEMICAL HAZARDS

Keep away from heat and open flame.

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

Not regulated.

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

Not listed.

### SARA 304 Emergency release notification

Dicrotophos (CAS 141-66-2) 100 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
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Dicrotophos	141-66-2	100	100 lbs		
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**SARA 311/312 Hazardous chemical**  
No

### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Bifenthrin	82657-04-3	10.8

### 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. Massachusetts RTK - Substance List**

Dicrotophos (CAS 141-66-2)

**US. New Jersey Worker and Community Right-to-Know Act**

Bifenthrin (CAS 82657-04-3)

Dicrotophos (CAS 141-66-2)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Dicrotophos (CAS 141-66-2)

**US. Rhode Island RTK**

Bifenthrin (CAS 82657-04-3)

Dicrotophos (CAS 141-66-2)

**US. California Proposition 65**

Not Listed.

#### 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** 05-08-2015

**Revision date** 05-12-2016

**References**

ACGIH  
EPA: AQUIRE database  
NLM: Hazardous Substances Data Base  
US. IARC Monographs on Occupational Exposures to Chemical Agents  
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 #** 02

**Further information** Not available.

**HMIS® ratings**

Health: 3\*  
Flammability: 2  
Physical hazard: 0

**NFPA ratings**

Health: 4  
Flammability: 2  
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**

Hazard(s) identification: Hazard statement  
Hazard(s) identification: Prevention  
Hazard(s) identification: GHS Symbols  
Hazard(s) identification: Hazard(s) not otherwise classified (HNOC)  
Hazard(s) identification: Supplemental information  
First-aid measures: Indication of immediate medical attention and special treatment needed  
Physical & Chemical Properties: Multiple Properties  
Physical and chemical properties: Appearance  
Toxicological Information: Toxicological Property Data  
Transport Information: Material Transportation Information  
Regulatory information: US federal regulations  
Other information, including date of preparation or last revision: Disclaimer  
GHS: Classification