

# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>ALCO™ CITRUS FIX™</b>	
<b>Other means of identification</b>		
<b>SDS number</b>	110	
<b>Product registration number</b>	5481-145	
<b>Recommended use</b>	Plant Growth Regulator	
<b>Recommended restrictions</b>	No other uses are advised. Keep out of the Reach of Children!	
<b>EPA Registration number</b>	EPA: 5481-145	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
<b>Manufacturer</b>		
<b>Company name</b>	AMVAC Chemical Corporation	
<b>Address</b>	4695 MacArthur Court Suite 1200 Newport Beach, CA 92660 United States	
<b>Telephone</b>	AMVAC Chemical Corp	949-260-1200
	AMVAC Chemical Corp	949-260-6270(FAX)
<b>E-mail</b>	CustServ@amvac.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 3
<b>Health hazards</b>	Acute toxicity, oral	Category 4
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Aspiration hazard	Category 1
<b>Environmental hazards</b>	Hazardous to the aquatic environment, long-term hazard	Category 2
<b>OSHA defined hazards</b>	Not classified.	

### Label elements



<b>Signal word</b>	Danger
<b>Hazard statement</b>	Flammable liquid and vapor. Harmful if swallowed. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. Toxic to aquatic life with long lasting effects.

## Precautionary statement

### Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Keep container tightly closed.  
Ground/bond container and receiving equipment.  
Use explosion-proof electrical/ventilating/lighting equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Do not breathe mist or vapor.  
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 personal protective equipment/face protection.

### Response

If swallowed: Immediately call a poison center/doctor.  
Rinse mouth. Do NOT induce vomiting.  
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
If inhaled: Remove person to fresh air and keep comfortable for breathing.  
If exposed or concerned: Get medical advice/attention.  
Call a poison center/doctor if you feel unwell.  
In case of fire: Use appropriate media to extinguish.

### Storage

Keep cool.  
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)

None known.

### Supplemental information

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 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	%
2, 4-Dichlorophenoxyacetic acid, isopropyl ester		94-11-1	45.0%
Solvent Naphta (petroleum), Light Aromatic		64742-95-6	40-50%

### Constituents

Chemical name	Common name and synonyms	CAS number	%
1,2, 4-Trimethylbenzene		95-63-6	< 16%
Cumene		98-82-8	< 0.5%
Xylene		1330-20-7	< 1.1%

### Impurities

Chemical name	Common name and synonyms	CAS number	%
2,4-Dichlorophenoxyacetic Acid [2,4-D acid]		94-75-7	< 0.8%

### Composition comments

Occupational Exposure Limits for impurities are listed in Section 8. All concentrations are in percent by weight.

## 4. First-aid measures

### Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

### Skin contact

Get medical attention if irritation develops and persists. Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Take off contaminated clothing and wash 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. 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.

<b>Ingestion</b>	Call a physician or poison control center immediately. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Immediately give large quantities of water to drink. Do not induce vomiting.
<b>Most important symptoms/effects, acute and delayed</b>	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Direct contact with eyes may cause temporary irritation. Prolonged exposure may cause chronic effects. Nausea, headaches, eye irritation. The presence of petroleum distillates may lead to central nervous system (CNS) depression, drying of the skin, dermatitis. Aspiration (breathing) of vomitus after swallowing may lead to aspiration pneumonitis.
<b>Indication of immediate medical attention and special treatment needed</b>	Preexisting neurological problems may be aggravated by exposure to this product. Near fatal exposures may result in congestive effects to a wide variety of organs based on the presence of petroleum distillates. Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. This product contains petroleum distillates. Gastric lavage should be considered following intubation with a cuffed endotracheal tube to prevent aspiration of vomitus. Contact your local or state poison control center for further information.
<b>General information</b>	Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). 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. Wash contaminated clothing before reuse.
<b>5. Fire-fighting measures</b>	
<b>Suitable extinguishing media</b>	Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	DO NOT USE WATER STREAM.
<b>Specific hazards arising from the chemical</b>	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed. This product emits hazardous fumes of unknown composition when burned.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	Flammable liquid and vapor.
<b>6. Accidental release measures</b>	
<b>Personal precautions, protective equipment and emergency procedures</b>	Immediately evacuate personnel to safe areas. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. 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.
<b>Methods and materials for containment and cleaning up</b>	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools.  Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.  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.  Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Clean the area with common powdered household detergent and a stiff brush and just enough water to make a slurry.
<b>Environmental precautions</b>	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

### Precautions for safe handling

Do not handle until all safety precautions have been read and understood. 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 taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling.

### 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 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).

Do not store near food, feed, fertilizers, seeds, insecticides or fungicides. Do not allow material to freeze.

## 8. Exposure controls/personal protection

### Occupational exposure limits

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

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

Components	Type	Value
Solvent Naphta (petroleum), Light Aromatic (CAS 64742-95-6)	PEL	400 mg/m3

100 ppm

Constituents	Type	Value
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Cumene (CAS 98-82-8) PEL 245 mg/m3

50 ppm

Xylene (CAS 1330-20-7) PEL 435 mg/m3

100 ppm

Impurities	Type	Value
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2,4-Dichlorophenoxyacetic  
Acid [2,4-D acid] (CAS  
94-75-7) PEL 10 mg/m3

#### US. ACGIH Threshold Limit Values

Constituents	Type	Value
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1,2, 4-Trimethylbenzene  
(CAS 95-63-6) TWA 25 ppm

Cumene (CAS 98-82-8) TWA 50 ppm

Xylene (CAS 1330-20-7) STEL 150 ppm

TWA 100 ppm

Impurities	Type	Value	Form
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2,4-Dichlorophenoxyacetic  
Acid [2,4-D acid] (CAS  
94-75-7) TWA 10 mg/m3 Inhalable fraction.

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

Components	Type	Value
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Solvent Naphta (petroleum),  
Light Aromatic (CAS  
64742-95-6) TWA 400 mg/m3

100 ppm

Constituents	Type	Value
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1,2, 4-Trimethylbenzene  
(CAS 95-63-6) TWA 125 mg/m3

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

Constituents	Type	Value
		25 ppm
Cumene (CAS 98-82-8)	TWA	245 mg/m <sup>3</sup>
		50 ppm
Xylene (CAS 1330-20-7)	STEL	655 mg/m <sup>3</sup>
		150 ppm
	TWA	435 mg/m <sup>3</sup>
		100 ppm
Impurities	Type	Value
2,4-Dichlorophenoxyacetic Acid [2,4-D acid] (CAS 94-75-7)	TWA	10 mg/m <sup>3</sup>

**Biological limit values****ACGIH Biological Exposure Indices**

Constituents	Value	Determinant	Specimen	Sampling Time
Xylene (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*

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

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

Cumene (CAS 98-82-8) Can be absorbed through the skin.

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

Cumene (CAS 98-82-8) Can be absorbed through the skin.

**Appropriate engineering controls**

Explosion-proof general and local exhaust ventilation. 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.

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

**Eye/face protection** Chemical respirator with organic vapor cartridge and full facepiece.

**Skin protection**

**Hand protection** Wear appropriate chemical resistant gloves.

**Other**

Wear suitable protective clothing. Use of an impervious apron is recommended.

**Respiratory protection**

Chemical respirator with organic vapor cartridge and full facepiece.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

Observe any medical surveillance requirements. When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties**

<b>Appearance</b>	Amber Liquid
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Amber
<b>Odor</b>	Aromatic solvent
<b>Odor threshold</b>	Not available.
<b>pH</b>	4 - 5 (as 5% emulsion)
<b>Melting point/freezing point</b>	80.6 °F (27 °C) estimated / < 32 °F (< 0 °C)
<b>Initial boiling point and boiling range</b>	325 °F (163 °C)
<b>Flash point</b>	103 °F (39 °C) Closed Cup

<b>Evaporation rate</b>	0.12 as compared to -Butanol
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	0.9 %
<b>Flammability limit - upper (%)</b>	6.4 %
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	3.80E+00 mm Hg
<b>Vapor density</b>	Heavier than air
<b>Relative density</b>	1.04 g/cm <sup>3</sup>
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Emulsifies in water
<b>Solubility (other)</b>	Soluble in aromatic hydrocarbons and ketones
<b>Partition coefficient (n-octanol/water)</b>	2.81
<b>Auto-ignition temperature</b>	905 °F (485 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Bulk density</b>	8.68 lb/gal
<b>Explosive properties</b>	Not explosive.
<b>Molecular formula</b>	C <sub>11</sub> -H <sub>12</sub> -Cl <sub>2</sub> -O <sub>3</sub>
<b>Molecular weight</b>	263.12 g/mol
<b>Oxidizing properties</b>	Not oxidizing.
<b>Specific gravity</b>	1.066 estimated

## 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>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents. Halogens. Strong acids. Alkaline compounds.
<b>Hazardous decomposition products</b>	Emits hazardous fumes and smoke of unknown composition when heated to decomposition or burned.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Harmful if swallowed. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

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

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Nausea, headaches, eye irritation. The presence of petroleum distillates may lead to central nervous system (CNS) depression, drying of the skin, dermatitis. Aspiration (breathing) of vomitus after swallowing may lead to aspiration pneumonitis. Direct contact with eyes may cause temporary irritation.

Preexisting neurological problems may be aggravated by exposure to this product. Near fatal exposures may result in congestive effects to a wide variety of organs based on the presence of petroleum distillates.

## Information on toxicological effects

**Acute toxicity** Harmful if swallowed. May be fatal if swallowed and enters airways.

Product	Species	Test Results
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ALCO™ CITRUS FIX™

### Acute

#### **Dermal**

LD50	Rabbit	> 2000 mg/kg
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#### **Inhalation**

LC50	Rat	> 4.97 mg/l, 4 h
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#### **Oral**

LD50	Rat	1250 mg/kg
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**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.

### **Respiratory or skin sensitization**

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** Not expected to be mutagenic.

**Carcinogenicity** Risk of cancer cannot be excluded with prolonged exposure. EPA lists 2,4-D acid, an impurity in 2,4-D Isopropyl Ester, as being in category D, not classifiable as a Human Carcinogen. IARC lists 2,4-D acid as being in category 2B. Care should be taken when handling this product.

### **IARC Monographs. Overall Evaluation of Carcinogenicity**

2,4-Dichlorophenoxyacetic Acid [2,4-D acid] (CAS 94-75-7) 2B Possibly carcinogenic to humans.

Cumene (CAS 98-82-8) 2B Possibly carcinogenic to humans.

Xylene (CAS 1330-20-7) 3 Not classifiable as to carcinogenicity to humans.

### **OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

Not regulated.

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

Cumene (CAS 98-82-8) Reasonably Anticipated to be a Human Carcinogen.

**Reproductive toxicity** Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals.

**Specific target organ toxicity - single exposure** May cause drowsiness and dizziness.

**Specific target organ toxicity - repeated exposure** Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard** May be fatal if swallowed and enters airways.

**Chronic effects** Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

## 12. Ecological information

### Ecotoxicity

Components	Species	Test Results
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Solvent Naphta (petroleum), Light Aromatic (CAS 64742-95-6)

#### **Aquatic**

Crustacea	EC50	Water flea (Daphnia pulex)	2.7 - 5.1 mg/l, 48 hours
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Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)	8.8 mg/l, 96 hours
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8.8 mg/l, 96 hours

**Persistence and degradability** No data is available on the degradability of any ingredients in the mixture.

### **Bioaccumulative potential**

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

2, 4-Dichlorophenoxyacetic acid, isopropyl ester 2.4

**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. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. If discarded, this product is considered a RCRA ignitable waste, D001. 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** D001: Waste Flammable material with a flash point <140 F  
D016: Waste 2,4-D  
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. Triple rinse (or equivalent).

### 14. Transport information

#### DOT

**UN number** UN1993  
**UN proper shipping name** Flammable liquids, n.o.s. (Petroleum distillates)  
**Transport hazard class(es)**  
**Class** 3  
**Subsidiary risk** -  
**Label(s)** 3  
**Packing group** III  
**Environmental hazards**  
**Marine pollutant** No  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
**Special provisions** B1, B52, IB3, T4, TP1, TP29  
**Packaging exceptions** 150  
**Packaging non bulk** 203  
**Packaging bulk** 242

#### IATA

**UN number** UN1993  
**UN proper shipping name** Flammable liquid, n.o.s. (Petroleum distillates)  
**Transport hazard class(es)**  
**Class** 3  
**Subsidiary risk** -  
**Label(s)** 3  
**Packing group** III  
**Environmental hazards** Yes, when shipped over large bodies of water in bulk  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
**Other information**  
**Passenger and cargo aircraft** Allowed with restrictions.  
**Cargo aircraft only** Allowed with restrictions.  
Read safety instructions, SDS and emergency procedures before handling.

#### IMDG

**UN number** UN1993  
**UN proper shipping name** Flammable liquid, n.o.s. (Petroleum distillates), MARINE POLLUTANT  
**Transport hazard class(es)**  
**Class** 3  
**Subsidiary risk** -  
**Label(s)** 3  
**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.

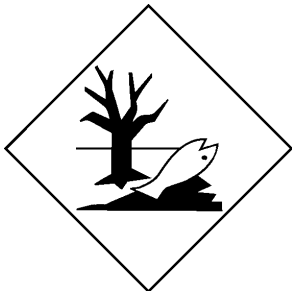
**DOT**



**IATA; IMDG**



**Marine pollutant**



**General information**

IMDG Regulated Marine Pollutant.

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

## 15. Regulatory information

### US federal regulations

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

This product is registered under EPA/FIFRA Regulations. 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.

CAUTION! Causes moderate eye irritation. Harmful by inhalation, in contact with skin and if swallowed. Avoid contact with eyes, skin, and clothing. Avoid inhalation of vapors and spray mists.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish 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 apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

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)

2, 4-Dichlorophenoxyacetic acid, isopropyl ester (CAS 94-11-1) Listed.

2,4-Dichlorophenoxyacetic Acid [2,4-D acid] (CAS 94-75-7) Listed.

Cumene (CAS 98-82-8) Listed.

Xylene (CAS 1330-20-7) Listed.

### SARA 304 Emergency release notification

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

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

#### SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

**Classified hazard categories** Flammable (gases, aerosols, liquids, or solids)  
Acute toxicity (any route of exposure)  
Specific target organ toxicity (single or repeated exposure)  
Aspiration hazard

#### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
2, 4-Dichlorophenoxyacetic acid, isopropyl ester	94-11-1	45.0%
2,4-Dichlorophenoxyacetic Acid [2,4-D acid]	94-75-7	< 0.8%

### Other federal regulations

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

2, 4-Dichlorophenoxyacetic acid, isopropyl ester (CAS 94-11-1)

2,4-Dichlorophenoxyacetic Acid [2,4-D acid] (CAS 94-75-7)

Cumene (CAS 98-82-8)

Xylene (CAS 1330-20-7)

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

Not regulated.

**Safe Drinking Water Act (SDWA)**      0.07 mg/l  
0.07 mg/l

**US state regulations**

**California Proposition 65**



**WARNING:** This product can expose you to Cumene, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Cumene (CAS 98-82-8)      Listed: April 6, 2010

**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)  
Cumene (CAS 98-82-8)  
Solvent Naphta (petroleum), Light Aromatic (CAS 64742-95-6)  
Xylene (CAS 1330-20-7)

**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**      May-08-2015  
**Revision date**      Sep-09-2020  
**Version #**      3.0  
**HMIS® ratings**      Health: 3  
Flammability: 3  
Physical hazard: 0  
**NFPA ratings**      Health: 2  
Flammability: 3  
Instability: 0

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