

SAFETY DATA SHEET

1. Identification

Product identifier	European Regulation Standards Pesticide Mixture 8	
Other means of identification		
Item	M-EUPESTMIX8H10	
Recommended use	For Laboratory Use Only	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/Distributor information		
Manufacturer		
Company name	Chem Service, Inc.	
Address	660 Tower Lane West Chester, PA 19380 United States	
Telephone	Toll Free	800-452-9994
	Direct	610-692-3026
Website	www.chemservice.com	
E-mail	info@chemservice.com	
Emergency phone number	Chemtrec US	800-424-9300
	Chemtrec outside US	+1 703-527-3887

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 2
Health hazards	Acute toxicity, inhalation	Category 1
	Serious eye damage/eye irritation	Category 2A
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 3
OSHA defined hazards	Not classified.	

Label elements



Signal word	Danger
Hazard statement	Highly flammable liquid and vapor. Causes serious eye irritation. Fatal if inhaled. May cause drowsiness or dizziness. Harmful 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 vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/eye protection/face protection. Wear respiratory protection.
Response	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 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). If eye irritation persists: Get medical advice/attention. 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)	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.
Supplemental information	99.98% of the mixture consists of component(s) of unknown acute inhalation toxicity. 99.98% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 99.98% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Ethyl acetate		141-78-6	99.979
1,1-Dichloropropene		563-58-6	0.001
2,4-D		94-75-7	0.001
2,4-D sec-butyl ester		94-79-1	0.001
4-Chloro-o-tolyloxyacetic acid		94-74-6	0.001
a-Endosulfan		959-98-8	0.001
Aldicarb		116-06-3	0.001
Atrazine		1912-24-9	0.001
b-Endosulfan		33213-65-9	0.001
Bentazon		25057-89-0	0.001
Bladex		21725-46-2	0.001
Chlorotoluron		15545-48-9	0.001
Dichlorprop		120-36-5	0.001
Isoproturon		34123-59-6	0.001
Lindane (BHC gamma isomer)		58-89-9	0.001
Mecoprop		7085-19-0	0.001
Metazachlor		67129-08-2	0.001
Metobromuron		3060-89-7	0.001
Metoxuron		19937-59-8	0.001
Sebuthylazin		7286-69-3	0.001
Simazine		122-34-9	0.001
Terbuthylazine		5915-41-3	0.001

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.
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. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal 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. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Take off all contaminated clothing immediately. 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.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Alcohol resistant foam. Carbon dioxide (CO ₂). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
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 form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Highly 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. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe vapors or spray mist. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. 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	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. Prevent product from entering drains. Large Spills: 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. 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. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. 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 vapors or spray mist. Avoid contact with eyes. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

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. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. 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

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
2,4-D (CAS 94-75-7)	PEL	10 mg/m ³
2,4-D sec-butyl ester (CAS 94-79-1)	PEL	10 mg/m ³
Ethyl acetate (CAS 141-78-6)	PEL	1400 mg/m ³
Lindane (BHC gamma isomer) (CAS 58-89-9)	PEL	400 ppm 0.5 mg/m ³

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
2,4-D (CAS 94-75-7)	TWA	10 mg/m ³	Inhalable fraction.
2,4-D sec-butyl ester (CAS 94-79-1)	TWA	10 mg/m ³	Inhalable fraction.
a-Endosulfan (CAS 959-98-8)	TWA	0.1 mg/m ³	Inhalable fraction and vapor.
Atrazine (CAS 1912-24-9)	TWA	2 mg/m ³	Inhalable fraction.
b-Endosulfan (CAS 33213-65-9)	TWA	0.1 mg/m ³	Inhalable fraction and vapor.
Ethyl acetate (CAS 141-78-6)	TWA	400 ppm	
Lindane (BHC gamma isomer) (CAS 58-89-9)	TWA	0.5 mg/m ³	
Simazine (CAS 122-34-9)	TWA	0.5 mg/m ³	Inhalable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
2,4-D (CAS 94-75-7)	TWA	10 mg/m ³
2,4-D sec-butyl ester (CAS 94-79-1)	TWA	10 mg/m ³
a-Endosulfan (CAS 959-98-8)	TWA	0.1 mg/m ³

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Atrazine (CAS 1912-24-9)	TWA	5 mg/m ³
b-Endosulfan (CAS 33213-65-9)	TWA	0.1 mg/m ³
Ethyl acetate (CAS 141-78-6)	TWA	1400 mg/m ³
Lindane (BHC gamma isomer) (CAS 58-89-9)	TWA	400 ppm 0.5 mg/m ³

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
Aldicarb (CAS 116-06-3)	TWA	0.01 mg/m ³ 0.001 ppm

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

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

a-Endosulfan (CAS 959-98-8)	Can be absorbed through the skin.
b-Endosulfan (CAS 33213-65-9)	Can be absorbed through the skin.
Lindane (BHC gamma isomer) (CAS 58-89-9)	Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

a-Endosulfan (CAS 959-98-8)	Skin designation applies.
b-Endosulfan (CAS 33213-65-9)	Skin designation applies.
Lindane (BHC gamma isomer) (CAS 58-89-9)	Skin designation applies.

US - Tennessee OELs: Skin designation

a-Endosulfan (CAS 959-98-8)	Can be absorbed through the skin.
b-Endosulfan (CAS 33213-65-9)	Can be absorbed through the skin.
Lindane (BHC gamma isomer) (CAS 58-89-9)	Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

2,4-D (CAS 94-75-7)	Can be absorbed through the skin.
2,4-D sec-butyl ester (CAS 94-79-1)	Can be absorbed through the skin.
a-Endosulfan (CAS 959-98-8)	Can be absorbed through the skin.
b-Endosulfan (CAS 33213-65-9)	Can be absorbed through the skin.
Lindane (BHC gamma isomer) (CAS 58-89-9)	Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

a-Endosulfan (CAS 959-98-8)	Can be absorbed through the skin.
b-Endosulfan (CAS 33213-65-9)	Can be absorbed through the skin.
Lindane (BHC gamma isomer) (CAS 58-89-9)	Can be absorbed through the skin.

US WEEL Guides: Skin designation

Aldicarb (CAS 116-06-3)	Can be absorbed through the skin.
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US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Lindane (BHC gamma isomer) (CAS 58-89-9)	Can be absorbed through the skin.
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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. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

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

When using do not 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

Physical state Liquid.

Form Liquid.

Color Not available.

Odor Not available.

Odor threshold Not available.

pH Not available.

Melting point/freezing point -117.4 °F (-83 °C) estimated

Initial boiling point and boiling range 170.6 °F (77 °C) estimated

Flash point 45.0 °F (7.2 °C) estimated

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 124.3 hPa estimated

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature 800 °F (426.67 °C) estimated

Decomposition temperature Not available.

Viscosity Not available.

Other information

Density 0.90336 g/cm³ estimated

Explosive properties Not explosive.

Flammability class Flammable IB estimated

Oxidizing properties Not oxidizing.

Percent volatile 99.98 % estimated

Specific gravity 0.9 estimated

VOC 99.98 % estimated

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

Incompatible materials Nitrates.

Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Fatal if inhaled. May cause drowsiness and dizziness. Headache. Nausea, vomiting.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Information on toxicological effects

Acute toxicity Fatal if inhaled.

Components	Species	Test Results
2,4-D (CAS 94-75-7)		
Acute		
Dermal		
LD50	Rabbit	1400 mg/kg
Oral		
LD50	Rat	275 mg/kg
2,4-D sec-butyl ester (CAS 94-79-1)		
Acute		
Dermal		
LD50	Rabbit	1400 mg/kg
Oral		
LD50	Rat	275 mg/kg
4-Chloro-o-tolyloxyacetic acid (CAS 94-74-6)		
Acute		
Oral		
LD50	Rat	700 mg/kg
a-Endosulfan (CAS 959-98-8)		
Acute		
Dermal		
LD50	Rat	34 mg/kg
Inhalation		
LC50	Rat	0.08 mg/l, 4 Hours
Aldicarb (CAS 116-06-3)		
Acute		
Dermal		
LD50	Rat	2.5 mg/kg
Oral		
LD50	Rat	0.65 mg/kg
Atrazine (CAS 1912-24-9)		
Acute		
Inhalation		
LC50	Rat	> 0.71 mg/l, 1 Hours
Oral		
LD50	Rat	1480 mg/kg
b-Endosulfan (CAS 33213-65-9)		
Acute		
Dermal		
LD50	Rat	34 mg/kg

Components	Species	Test Results
Inhalation		
LC50	Rat	0.08 mg/l, 4 Hours
Bentazon (CAS 25057-89-0)		
Acute		
Dermal		
LD50	Rat	2500 mg/kg
Oral		
LD50	Rat	1100 mg/kg
Bladex (CAS 21725-46-2)		
Acute		
Dermal		
LD50	Rat	1200 mg/kg
Oral		
LD50	Rat	149 mg/kg
Dichlorprop (CAS 120-36-5)		
Acute		
Inhalation		
LC50	Rat	> 0.65 mg/l, 4 Hours
Oral		
LD50	Rat	344 mg/kg
Lindane (BHC gamma isomer) (CAS 58-89-9)		
Acute		
Dermal		
LD50	Rabbit	50 mg/kg
Inhalation		
LC50	Rat	1.56 mg/l
Oral		
LD50	Rat	76 mg/kg
Simazine (CAS 122-34-9)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg
Terbutylazine (CAS 5915-41-3)		
Acute		
Inhalation		
LC50	Rat	> 3.51 mg/l, 4 Hours
Oral		
LD50	Rat	2000 mg/kg

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

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

Serious eye damage/eye irritation Causes serious eye 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 No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

2,4-D (CAS 94-75-7)

2B Possibly carcinogenic to humans.

2,4-D sec-butyl ester (CAS 94-79-1)
 4-Chloro-o-tolyloxyacetic acid (CAS 94-74-6)
 Aldicarb (CAS 116-06-3)
 Atrazine (CAS 1912-24-9)
 Dichlorprop (CAS 120-36-5)
 Lindane (BHC gamma isomer) (CAS 58-89-9)
 Simazine (CAS 122-34-9)

2B Possibly carcinogenic to humans.
 2B Possibly carcinogenic to humans.
 3 Not classifiable as to carcinogenicity to humans.
 3 Not classifiable as to carcinogenicity to humans.
 2B Possibly carcinogenic to humans.
 1 Carcinogenic to humans.
 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Lindane (BHC gamma isomer) (CAS 58-89-9) Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure May cause drowsiness and dizziness.
Specific target organ toxicity - repeated exposure Not classified.
Aspiration hazard Not an aspiration hazard.
Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Components	Species	Test Results
2,4-D (CAS 94-75-7)		
Aquatic		
Crustacea EC50	Water flea (Daphnia pulex)	2.4 - 4.3 mg/l, 48 hours
Fish LC50	Fish (Labeo boga)	3.8 mg/l, 96 hours
2,4-D sec-butyl ester (CAS 94-79-1)		
Aquatic		
Crustacea EC50	Water flea (Daphnia pulex)	2.4 - 4.3 mg/l, 48 hours
Fish LC50	Fish (Labeo boga)	3.8 mg/l, 96 hours
4-Chloro-o-tolyloxyacetic acid (CAS 94-74-6)		
Aquatic		
Fish LC50	Bluegill (Lepomis macrochirus)	> 10 mg/l, 96 hours
a-Endosulfan (CAS 959-98-8)		
Aquatic		
Crustacea EC50	Water flea (Daphnia carinata)	0.18 mg/l, 48 hours
Fish LC50	Snake-head catfish (Channa punctata)	0.0001 - 0.0002 mg/l, 96 hours
Aldicarb (CAS 116-06-3)		
Aquatic		
Crustacea EC50	Water flea (Daphnia laevis)	0.045 - 0.059 mg/l, 48 hours
Fish LC50	Bluegill (Lepomis macrochirus)	0.05 mg/l, 96 hours
Atrazine (CAS 1912-24-9)		
Aquatic		
Crustacea EC50	Water flea (Daphnia pulex)	28.8 - 46.3 mg/l, 48 hours
Fish LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)	3.5 - 5.7 mg/l, 96 hours
b-Endosulfan (CAS 33213-65-9)		
Aquatic		
Crustacea EC50	Water flea (Daphnia carinata)	0.18 mg/l, 48 hours
Fish LC50	Snake-head catfish (Channa punctata)	0.0066 - 0.0067 mg/l, 96 hours
Bentazon (CAS 25057-89-0)		
Aquatic		
Fish LC50	Carp (Cyprinus carpio)	890 - 1100 mg/l, 96 hours

Components		Species	Test Results
Bladex (CAS 21725-46-2)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	35.5 mg/l, 48 hours
Fish	LC50	Channel catfish (Ictalurus punctatus)	7.7 - 14 mg/l, 96 hours
Chlorotoluron (CAS 15545-48-9)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	35 mg/l, 96 hours
Dichlorprop (CAS 120-36-5)			
Aquatic			
Fish	LC50	Brown trout (Salmo trutta)	78 mg/l, 96 hours
Ethyl acetate (CAS 141-78-6)			
Aquatic			
Fish	LC50	Indian catfish (Heteropneustes fossilis)	200.32 - 225.42 mg/l, 96 hours
Isoproturon (CAS 34123-59-6)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 1 mg/l, 48 hours
Lindane (BHC gamma isomer) (CAS 58-89-9)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	0.386 - 0.547 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.02 - 0.027 mg/l, 96 hours
Metobromuron (CAS 3060-89-7)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	36 mg/l, 96 hours
Metoxuron (CAS 19937-59-8)			
Aquatic			
Fish	LC50	Harlequinfish, red rasbora (Rasbora heteromorpha)	40 mg/l, 96 hours
Simazine (CAS 122-34-9)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	0.56 - 2.2 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	> 10 mg/l, 96 hours
Terbuthylazine (CAS 5915-41-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 5 mg/l, 48 hours
Fish	LC50	Guppy (Poecilia reticulata)	1.6 mg/l, 96 hours

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

Persistence and degradability

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

2,4-D	2.81
2,4-D sec-butyl ester	2.81
4-Chloro-o-tolyloxyacetic acid	3.25
a-Endosulfan	3.83
Aldicarb	1.13
Atrazine	2.61
b-Endosulfan	3.83
Bentazon	2.8
Bladex	2.22
Chlorotoluron	2.41

Partition coefficient n-octanol / water (log Kow)	
Ethyl acetate	0.73
Lindane (BHC gamma isomer)	3.72
Simazine	2.18

Mobility in soil No data available.

Other adverse effects The product contains volatile organic compounds which have a photochemical ozone creation potential.

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.

US RCRA Hazardous Waste P List: Reference

a-Endosulfan (CAS 959-98-8)	P050
Aldicarb (CAS 116-06-3)	P070
b-Endosulfan (CAS 33213-65-9)	P050

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

UN number	UN1173
UN proper shipping name	Ethyl acetate, solution (Ethyl acetate RQ = 5001 LBS)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	II
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	IB2, T4, TP1
Packaging exceptions	150
Packaging non bulk	202
Packaging bulk	242

IATA

UN number	UN1173
UN proper shipping name	Ethyl acetate solution (Ethyl acetate)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	II
Environmental hazards	No.
ERG Code	3L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

UN number	UN1173
UN proper shipping name	ETHYL ACETATE SOLUTION (Ethyl acetate)
Transport hazard class(es)	
Class	3
Subsidiary risk	-

Packing group II

Environmental hazards

Marine pollutant No.

EmS F-E, S-D

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



15. Regulatory information

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

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

Dichlorprop (CAS 120-36-5) 0.1 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

1,1-Dichloropropene (CAS 563-58-6) Listed.

2,4-D (CAS 94-75-7) Listed.

2,4-D sec-butyl ester (CAS 94-79-1) Listed.

a-Endosulfan (CAS 959-98-8) Listed.

Aldicarb (CAS 116-06-3) Listed.

b-Endosulfan (CAS 33213-65-9) Listed.

Ethyl acetate (CAS 141-78-6) Listed.

Lindane (BHC gamma isomer) (CAS 58-89-9) Listed.

SARA 304 Emergency release notification

a-Endosulfan (CAS 959-98-8) 1 LBS

Aldicarb (CAS 116-06-3) 1 LBS

b-Endosulfan (CAS 33213-65-9) 1 LBS

Lindane (BHC gamma isomer) (CAS 58-89-9) 1 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 - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
a-Endosulfan	959-98-8	1		10	10000
Aldicarb	116-06-3	1		100	10000
b-Endosulfan	33213-65-9	1		10	10000
Lindane (BHC gamma isomer)	58-89-9	1		1000	10000

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

- 2,4-D (CAS 94-75-7)
- 2,4-D sec-butyl ester (CAS 94-79-1)
- Lindane (BHC gamma isomer) (CAS 58-89-9)

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

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Ethyl acetate (CAS 141-78-6) Low priority

US state regulations WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

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

Lindane (BHC gamma isomer) (CAS 58-89-9) Listed: October 1, 1989

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Atrazine (CAS 1912-24-9) Listed: July 15, 2016
Bladex (CAS 21725-46-2) Listed: April 1, 1990
Simazine (CAS 122-34-9) Listed: July 15, 2016

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

Atrazine (CAS 1912-24-9) Listed: July 15, 2016
Simazine (CAS 122-34-9) Listed: July 15, 2016

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	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 09-19-2019

Revision date 09-23-2019
Version # 02
NFPA ratings Health: 4
Flammability: 3
Instability: 0

Disclaimer

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