

## SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>European Regulation Standards Pesticide Mixture 14</b>	
<b>Other means of identification</b>		
<b>Item</b>	M-EUPESTMIX14E22	
<b>Recommended use</b>	For Laboratory Use Only	
<b>Recommended restrictions</b>	None known.	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
<b>Manufacturer</b>		
<b>Company name</b>	Chem Service, Inc.	
<b>Address</b>	660 Tower Lane West Chester, PA 19380 United States	
<b>Telephone</b>	Toll Free	800-452-9994
	Direct	610-692-3026
<b>Website</b>	www.chemservice.com	
<b>E-mail</b>	info@chemservice.com	
<b>Emergency phone number</b>	Chemtrec US	800-424-9300
	Chemtrec outside US	+1 703-527-3887

## 2. Hazard(s) identification

<b>Physical hazards</b>	Flammable liquids	Category 2
<b>Health hazards</b>	Acute toxicity, dermal	Category 4
	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Aspiration hazard	Category 1
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1
<b>OSHA defined hazards</b>	Not classified.	

## Label elements



<b>Signal word</b>	Danger
<b>Hazard statement</b>	Highly flammable liquid and vapor. May be fatal if swallowed and enters airways. Harmful in contact with skin. Causes skin irritation. Harmful if inhaled. May cause drowsiness or dizziness. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
<b>Precautionary statement</b>	
<b>Prevention</b>	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. Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing. Wear protective gloves/eye protection/face protection.

<b>Response</b>	If swallowed: Immediately call a poison center/doctor. 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. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage.
<b>Storage</b>	Keep cool. Store in a well-ventilated place. Keep container tightly closed. 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>	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.
<b>Supplemental information</b>	100% of the mixture consists of component(s) of unknown acute inhalation toxicity.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Cyclohexane		110-82-7	99.9995
BHC (alpha isomer)		319-84-6	0.0001
BHC (beta isomer)		319-85-7	0.0001
BHC (delta isomer)		319-86-8	0.0001
BHC (epsilon isomer)		6108-10-7	0.0001
Lindane (BHC gamma isomer)		58-89-9	0.0001

### 4. First-aid measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.
<b>Skin contact</b>	Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. 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. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
<b>Most important symptoms/effects, acute and delayed</b>	Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Direct contact with eyes may cause temporary irritation. Skin irritation. May cause redness and pain.
<b>Indication of immediate medical attention and special treatment needed</b>	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.
<b>General information</b>	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

<b>Suitable extinguishing media</b>	Water fog. Foam. Carbon dioxide (CO <sub>2</sub> ). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<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. 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.
<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.

**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. Avoid inhalation of vapors and spray mists. 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. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

**Large Spills:** Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. 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. 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. Avoid inhalation of vapors and spray mists. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. 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.

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
Cyclohexane (CAS 110-82-7)	PEL	1050 mg/m <sup>3</sup>
		300 ppm
Lindane (BHC gamma isomer) (CAS 58-89-9)	PEL	0.5 mg/m <sup>3</sup>

**US. ACGIH Threshold Limit Values**

Components	Type	Value
Cyclohexane (CAS 110-82-7)	TWA	100 ppm
Lindane (BHC gamma isomer) (CAS 58-89-9)	TWA	0.5 mg/m <sup>3</sup>

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

Components	Type	Value
Cyclohexane (CAS 110-82-7)	TWA	1050 mg/m <sup>3</sup>
		300 ppm
Lindane (BHC gamma isomer) (CAS 58-89-9)	TWA	0.5 mg/m <sup>3</sup>

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

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

Lindane (BHC gamma isomer) (CAS 58-89-9) Can be absorbed through the skin.

**US - Minnesota Haz Subs: Skin designation applies**

Lindane (BHC gamma isomer) (CAS 58-89-9) Skin designation applies.

**US - Tennessee OELs: Skin designation**

Lindane (BHC gamma isomer) (CAS 58-89-9) Can be absorbed through the skin.

**US ACGIH Threshold Limit Values: Skin designation**

Lindane (BHC gamma isomer) (CAS 58-89-9) Can be absorbed through the skin.

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

Lindane (BHC gamma isomer) (CAS 58-89-9) Can be absorbed through the skin.

**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.

**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. Eye wash fountain and emergency showers are recommended.

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

**Eye/face protection** Face shield is recommended. Wear safety glasses with side shields (or goggles).

**Skin protection**

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

**Other**

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

**Respiratory protection**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Chemical respirator with organic vapor cartridge.

**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.

<b>Form</b>	Liquid.
<b>Color</b>	Not available.
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	43.65 °F (6.47 °C) estimated
<b>Initial boiling point and boiling range</b>	177.26 °F (80.7 °C) estimated
<b>Flash point</b>	-0.4 °F (-18.0 °C) estimated
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	1.3 % estimated
<b>Flammability limit - upper (%)</b>	8.4 % estimated
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	129.2 hPa estimated
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	473 °F (245 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Density</b>	0.77801 g/cm3 estimated
<b>Explosive properties</b>	Not explosive.
<b>Flammability class</b>	Flammable IB estimated
<b>Oxidizing properties</b>	Not oxidizing.
<b>Percent volatile</b>	100 % estimated
<b>Specific gravity</b>	0.78 estimated
<b>VOC</b>	100 % 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>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Harmful if inhaled. May cause drowsiness and dizziness. Headache. Nausea, vomiting.
<b>Skin contact</b>	Harmful in contact with skin. Causes skin irritation.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.

**Ingestion**

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**

Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Skin irritation. May cause redness and pain.

**Information on toxicological effects**

**Acute toxicity**

In high concentrations, vapors are anesthetic and may cause headache, fatigue, dizziness and central nervous system effects. May be fatal if swallowed and enters airways. Harmful if inhaled. Harmful in contact with skin.

Components	Species	Test Results
BHC (alpha isomer) (CAS 319-84-6)		
<u>Acute</u>		
<b>Dermal</b>		
LD50	Rat	0.9 mg/kg
<b>Oral</b>		
LD50	Rat	177 mg/kg
BHC (beta isomer) (CAS 319-85-7)		
<u>Acute</u>		
<b>Dermal</b>		
LD50	Rat	0.9 mg/kg
BHC (delta isomer) (CAS 319-86-8)		
<u>Acute</u>		
<b>Dermal</b>		
LD50	Rat	0.9 mg/kg
BHC (epsilon isomer) (CAS 6108-10-7)		
<u>Acute</u>		
<b>Dermal</b>		
LD50	Rat	0.9 mg/kg
<b>Oral</b>		
LD50	Rat	100 mg/kg
Cyclohexane (CAS 110-82-7)		
<u>Acute</u>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
Lindane (BHC gamma isomer) (CAS 58-89-9)		
<u>Acute</u>		
<b>Dermal</b>		
LD50	Rabbit	50 mg/kg
<b>Inhalation</b>		
LC50	Rat	1.56 mg/l
<b>Oral</b>		
LD50	Rat	76 mg/kg

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

**Skin corrosion/irritation**

Causes skin 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**

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

BHC (alpha isomer) (CAS 319-84-6)	2B Possibly carcinogenic to humans.
BHC (beta isomer) (CAS 319-85-7)	2B Possibly carcinogenic to humans.
BHC (delta isomer) (CAS 319-86-8)	2B Possibly carcinogenic to humans.
BHC (epsilon isomer) (CAS 6108-10-7)	2B Possibly carcinogenic to humans.
Lindane (BHC gamma isomer) (CAS 58-89-9)	1 Carcinogenic to humans.

## OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

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

BHC (alpha isomer) (CAS 319-84-6)	Reasonably Anticipated to be a Human Carcinogen.
BHC (beta isomer) (CAS 319-85-7)	Reasonably Anticipated to be a Human Carcinogen.
BHC (delta isomer) (CAS 319-86-8)	Reasonably Anticipated to be a Human Carcinogen.
BHC (epsilon isomer) (CAS 6108-10-7)	Reasonably Anticipated to be a Human Carcinogen.
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** May be fatal if swallowed and enters airways.

**Chronic effects** Prolonged inhalation may be harmful.

## 12. Ecological information

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

Components		Species	Test Results
BHC (alpha isomer) (CAS 319-84-6)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea ( <i>Daphnia magna</i> )	0.6 - 1 mg/l, 48 hours
Fish	LC50	Zebra danio ( <i>Danio rerio</i> )	0.82 - 1.51 mg/l, 96 hours
BHC (beta isomer) (CAS 319-85-7)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea ( <i>Daphnia pulex</i> )	0.68 mg/l, 48 hours
Fish	LC50	Guppy ( <i>Poecilia reticulata</i> )	1 - 3.55 mg/l, 96 hours
BHC (delta isomer) (CAS 319-86-8)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea ( <i>Daphnia pulex</i> )	0.68 mg/l, 48 hours
Fish	LC50	Zebra danio ( <i>Danio rerio</i> )	1.15 - 2.17 mg/l, 96 hours
BHC (epsilon isomer) (CAS 6108-10-7)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea ( <i>Daphnia pulex</i> )	0.68 mg/l, 48 hours
Fish	LC50	Borneo Mullet ( <i>Liza macrolepis</i> )	0.0327 - 0.041 mg/l, 96 hours
Cyclohexane (CAS 110-82-7)			
<b>Aquatic</b>			
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> )	23.03 - 42.07 mg/l, 96 hours
Lindane (BHC gamma isomer) (CAS 58-89-9)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea ( <i>Daphnia pulex</i> )	0.386 - 0.547 mg/l, 48 hours
Fish	LC50	Rainbow trout, donaldson trout ( <i>Oncorhynchus mykiss</i> )	0.02 - 0.027 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)**

BHC (alpha isomer)	3.8
BHC (beta isomer)	3.78
BHC (delta isomer)	4.14
Cyclohexane	3.44
Lindane (BHC gamma isomer)	3.72

**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.

**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**

<b>UN number</b>	UN1145
<b>UN proper shipping name</b>	Cyclohexane, solution (Cyclohexane RQ = 1000 LBS), MARINE POLLUTANT
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	3
<b>Packing group</b>	II
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	IB2, T4, TP1
<b>Packaging exceptions</b>	150
<b>Packaging non bulk</b>	202
<b>Packaging bulk</b>	242

**IATA**

<b>UN number</b>	UN1145
<b>UN proper shipping name</b>	Cyclohexane solution (Cyclohexane)
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Packing group</b>	II
<b>Environmental hazards</b>	Yes
<b>ERG Code</b>	3H
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<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>	UN1145
<b>UN proper shipping name</b>	CYCLOHEXANE SOLUTION (Cyclohexane), MARINE POLLUTANT
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-



**Packing group** II

**Environmental hazards**

**Marine pollutant** Yes

**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.

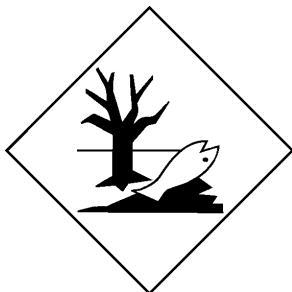
**DOT**



**IATA; IMDG**



**Marine pollutant**



**General information**

IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant.

## 15. Regulatory information

**US federal regulations**

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

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

Not regulated.

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

BHC (alpha isomer) (CAS 319-84-6)	Listed.
BHC (beta isomer) (CAS 319-85-7)	Listed.
BHC (delta isomer) (CAS 319-86-8)	Listed.
BHC (epsilon isomer) (CAS 6108-10-7)	Listed.
Cyclohexane (CAS 110-82-7)	Listed.
Lindane (BHC gamma isomer) (CAS 58-89-9)	Listed.

### SARA 304 Emergency release notification

Lindane (BHC gamma isomer) (CAS 58-89-9)	1 LBS
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### 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)
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Lindane (BHC gamma isomer)	58-89-9	1		1000	10000
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**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
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Cyclohexane	110-82-7	99.9995
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**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

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.

**US state regulations** WARNING: This product contains a chemical known to the State of California to cause cancer.

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

BHC (alpha isomer) (CAS 319-84-6)	Listed: October 1, 1989
BHC (beta isomer) (CAS 319-85-7)	Listed: October 1, 1989
BHC (delta isomer) (CAS 319-86-8)	Listed: October 1, 1987
BHC (epsilon isomer) (CAS 6108-10-7)	Listed: October 1, 1987
Lindane (BHC gamma isomer) (CAS 58-89-9)	Listed: October 1, 1989

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
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)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*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** 04-26-2021  
**Version #** 01  
**NFPA ratings** Health: 2  
 Flammability: 3  
 Instability: 0

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