

1. Identification

Product identifier	Phthalate Esters Mixture - 8061	
Other means of identification		
Item	M-PT80611K4	
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	Skin corrosion/irritation	Category 2
	Carcinogenicity	Category 2
	Reproductive toxicity	Category 1
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Aspiration hazard	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1
OSHA defined hazards	Not classified.	

Label elements

Signal word	Danger
Hazard statement	Highly flammable liquid and vapor. Causes skin irritation. May cause drowsiness or dizziness. Suspected of causing cancer. May damage fertility or the unborn child. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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/eye protection/face 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 exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. Specific treatment (see this label). 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.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. 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	% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. % 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	%
Isooctane	2,2,4-Trimethylpentane	540-84-1	98.4
Bis(2-ethoxyethyl)phthalate		605-54-9	0.1
Bis(2-ethylhexyl)phthalate		117-81-7	0.1
Bis(2-methoxyethyl)phthalate		117-82-8	0.1
Bis(2-n-butoxyethyl)phthalate		117-83-9	0.1
Bis(4-methyl-2-pentyl) phthalate		84-63-9	0.1
Butyl benzyl phthalate		85-68-7	0.1
Diamyl phthalate		131-18-0	0.1
Dicyclohexyl phthalate		84-61-7	0.1
Diethyl phthalate		84-66-2	0.1
Diisobutyl phthalate		84-69-5	0.1
Dimethyl phthalate		131-11-3	0.1
Di-n-butyl phthalate		84-74-2	0.1
Di-n-hexyl phthalate		84-75-3	0.1
Di-n-octyl phthalate		117-84-0	0.1
Dinonyl phthalate		84-76-4	0.1
Hexyl 2-ethylhexyl phthalate(Technical)		75673-16-4	0.1

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	Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. 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. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation. Skin irritation. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. May cause redness and pain.
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 under observation. Symptoms may be delayed.
General information	Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. 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. 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. Avoid inhalation of vapors or 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	<p>Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.</p> <p>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p>
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. Contact local authorities in case of spillage to drain/aquatic 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. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Vapors may form explosive mixtures with air. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. 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 breathing mist or vapor. Avoid contact with skin. Avoid contact with eyes. Avoid contact during pregnancy/while nursing. Avoid prolonged exposure. Avoid contact with clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.

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. Avoid spark promoters. Eliminate sources of ignition. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Refrigeration recommended. Store away from incompatible materials (see Section 10 of the SDS). Keep in an area equipped with sprinklers.

8. Exposure controls/personal protection

Occupational exposure limits

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

Components	Type	Value
Bis(2-ethylhexyl)phthalate (CAS 117-81-7)	PEL	5 mg/m ³
Dimethyl phthalate (CAS 131-11-3)	PEL	5 mg/m ³
Di-n-butyl phthalate (CAS 84-74-2)	PEL	5 mg/m ³
Isooctane (CAS 540-84-1)	PEL	2350 mg/m ³ 500 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Bis(2-ethylhexyl)phthalate (CAS 117-81-7)	TWA	5 mg/m ³
Diethyl phthalate (CAS 84-66-2)	TWA	5 mg/m ³
Dimethyl phthalate (CAS 131-11-3)	TWA	5 mg/m ³
Di-n-butyl phthalate (CAS 84-74-2)	TWA	5 mg/m ³

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Bis(2-ethylhexyl)phthalate (CAS 117-81-7)	STEL	10 mg/m ³
	TWA	5 mg/m ³
Diethyl phthalate (CAS 84-66-2)	TWA	5 mg/m ³
Dimethyl phthalate (CAS 131-11-3)	TWA	5 mg/m ³
Di-n-butyl phthalate (CAS 84-74-2)	TWA	5 mg/m ³

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Isooctane (CAS 540-84-1)	Ceiling	1800 mg/m ³
		385 ppm
	TWA	350 mg/m ³ 75 ppm
Biological limit values	No biological exposure limits noted for the ingredient(s).	
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 facilities and emergency shower must be available when handling this product.	
Individual protection measures, such as personal protective equipment		
Eye/face protection	Wear safety glasses with side shields (or goggles).	
Skin protection		
Hand protection	Wear appropriate chemical resistant gloves.	
Other	Wear appropriate chemical resistant clothing.	
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.	
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**

Physical state	Liquid.
Form	Liquid
Color	Not available.
Odor	Not available.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	-161.41 °F (-107.45 °C) estimated
Initial boiling point and boiling range	210.63 °F (99.24 °C) estimated
Flash point	40.1 °F (4.5 °C) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	1.1 % estimated
Flammability limit - upper (%)	6 % estimated
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	65.73 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	784 °F (417.78 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	0.70361 g/cm3 estimated
Flammability class	Flammable IB estimated
Percent volatile	0.1 % estimated
Specific gravity	0.7 estimated
VOC	0.1 % 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	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Skin irritation. May cause redness and pain. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Information on toxicological effects

Acute toxicity Narcotic effects. Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

Components	Species	Test Results
Bis(2-ethylhexyl)phthalate (CAS 117-81-7)		
Acute		
Dermal		
LD50	Guinea pig	10 g/kg
	Rabbit	25 g/kg
		20 ml/kg, 24 Hours
Oral		
LD50	Guinea pig	26.3 g/kg
	Mouse	> 30 g/kg
	Rabbit	33.9 g/kg
	Rat	> 25 g/kg
Bis(2-methoxyethyl)phthalate (CAS 117-82-8)		
Acute		
Dermal		
LD50	Guinea pig	10 g/kg
Oral		
LD50	Guinea pig	1600 mg/kg

Components	Species	Test Results
	Mouse	3.2 g/kg
	Rat	4.4 g/kg
Butyl benzyl phthalate (CAS 85-68-7)		
Acute		
Dermal		
LD50	Mouse	6700 mg/kg
	Rat	6700 mg/kg
Oral		
LD50	Mouse	4170 mg/kg
	Rat	2330 mg/kg
Dicyclohexyl phthalate (CAS 84-61-7)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours
Oral		
LD50	Rat	> 2000 mg/kg
Diethyl phthalate (CAS 84-66-2)		
Acute		
Dermal		
LD50	Rat	> 22400 mg/kg > 10 ml/kg, 24 Hours
Inhalation		
LC50	Rat	> 4.64 mg/l, 6 Hours
Oral		
LD50	Rat	> 5 ml/kg 9500 - 31000 mg/kg
Diisobutyl phthalate (CAS 84-69-5)		
Acute		
Dermal		
LD50	Guinea pig	10 g/kg
Oral		
LD50	Mouse	12.8 g/kg
	Rabbit	3200 - 6400 mg/kg
	Rat	10392 mg/kg
Dimethyl phthalate (CAS 131-11-3)		
Acute		
Dermal		
LD50	Rabbit	> 12000 mg/kg
	Rat	38000 mg/kg
Oral		
LD50	Guinea pig	2900 mg/kg
	Hen	10200 mg/kg
	Mouse	8600 mg/kg
	Rabbit	5300 mg/kg
	Rat	8200 mg/kg
Di-n-butyl phthalate (CAS 84-74-2)		
Acute		
Dermal		
LD50	Rabbit	4200 mg/kg

Components	Species	Test Results
		20 ml/kg
Inhalation		
LC50	Mouse	25 mg/l, 2 Hours
<i>Aerosol</i>		
LC50	Rat	>= 15.68 mg/l, 4 Hours
Oral		
LD50	Guinea pig	10000 mg/kg
	Mouse	4840 mg/kg
	Rat	6279 mg/kg
Di-n-hexyl phthalate (CAS 84-75-3)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	20000 mg/kg
Oral		
LD50	Rat	29600 mg/kg
Di-n-octyl phthalate (CAS 117-84-0)		
<u>Acute</u>		
Dermal		
LD50	Guinea pig	4900 mg/kg
Oral		
LD50	Mouse	13000 mg/kg
	Rat	53700 mg/kg
Dinonyl phthalate (CAS 84-76-4)		
<u>Acute</u>		
Oral		
LD50	Rat	2 g/kg
Isooctane (CAS 540-84-1)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2000 mg/kg, 24 Hours

* 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 available.
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	Suspected of causing cancer.
IARC Monographs. Overall Evaluation of Carcinogenicity	
Bis(2-ethylhexyl)phthalate (CAS 117-81-7)	2B Possibly carcinogenic to humans.
Butyl benzyl phthalate (CAS 85-68-7)	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	
Bis(2-ethylhexyl)phthalate (CAS 117-81-7)	Reasonably Anticipated to be a Human Carcinogen.
Reproductive toxicity	May damage fertility or the unborn child.
Specific target organ toxicity - single exposure	Narcotic effects.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not available.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

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

Components	Species	Test Results
Bis(2-ethylhexyl)phthalate (CAS 117-81-7)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia pulex</i>) 0.133 mg/l, 48 hours
Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>) > 0.2 mg/l, 96 hours
		> 0.2 mg/l, 96 hours
Butyl benzyl phthalate (CAS 85-68-7)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) > 0.96 mg/l, 48 hours
Fish	LC50	Shiner perch (<i>Cymatogaster aggregata</i>) 0.47 - 0.56 mg/l, 96 hours
Diethyl phthalate (CAS 84-66-2)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) 86 mg/l, 48 hours
Fish	LC50	Rainbow trout, donaldson trout (<i>Oncorhynchus mykiss</i>) 12 mg/l, 96 hours
Diisobutyl phthalate (CAS 84-69-5)		
Aquatic		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 0.73 - 1.1 mg/l, 96 hours
Dimethyl phthalate (CAS 131-11-3)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) 45.9 mg/l, 48 hours
Fish	LC50	Sheepshead minnow (<i>Cyprinodon variegatus</i>) 29 mg/l, 96 hours
Di-n-butyl phthalate (CAS 84-74-2)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) 2.99 mg/l, 48 hours
Fish	LC50	Channel catfish (<i>Ictalurus punctatus</i>) 0.4 - 0.53 mg/l, 96 hours
Di-n-hexyl phthalate (CAS 84-75-3)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) > 0.18 mg/l, 48 hours
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) > 0.1 mg/l, 96 hours

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

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

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

Bis(2-ethylhexyl)phthalate	7.6
Butyl benzyl phthalate	4.91
Diamyl phthalate	5.62
Diethyl phthalate	2.47
Diisobutyl phthalate	4.11
Dimethyl phthalate	1.6
Di-n-butyl phthalate	4.9
Di-n-hexyl phthalate	6.82
Di-n-octyl phthalate	8.1
Isooctane	5.18

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. 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 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 Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number UN1262
UN proper shipping name Octanes, solution (Isooctane RQ = 1016 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 UN1262
UN proper shipping name Octanes solution (Isooctane)
Transport hazard class(es)
Class 3
Subsidiary risk -
Packing group II
Environmental hazards No.
ERG Code 3H
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 UN1262
UN proper shipping name OCTANES SOLUTION (Isooctane)
Transport hazard class(es)
Class 3
Subsidiary risk -
Packing group II
Environmental hazards
Marine pollutant No.
EmS F-E, S-E
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 available.

DOT



IATA; IMDG



General information

DOT Regulated Marine Pollutant. IMDG Regulated Marine Pollutant.

15. Regulatory information

US federal regulations

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

One or more components are not listed on TSCA.

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

Diamyl phthalate (CAS 131-18-0)

1.0 % One-Time Export Notification only.

TSCA Chemical Action Plans, Chemicals of Concern

Bis(2-ethylhexyl)phthalate (CAS 117-81-7)

Phthalates Action Plan

Bis(2-methoxyethyl)phthalate (CAS 117-82-8)

Phthalates Action Plan

Bis(2-n-butoxyethyl)phthalate (CAS 117-83-9)

Phthalates Action Plan

Bis(4-methyl-2-pentyl) phthalate (CAS 84-63-9)

Phthalates Action Plan

Butyl benzyl phthalate (CAS 85-68-7)

Phthalates Action Plan

Diamyl phthalate (CAS 131-18-0)

Phthalates Action Plan

Dicyclohexyl phthalate (CAS 84-61-7)

Phthalates Action Plan

Diethyl phthalate (CAS 84-66-2)

Phthalates Action Plan

Diisobutyl phthalate (CAS 84-69-5)

Phthalates Action Plan

Dimethyl phthalate (CAS 131-11-3)

Phthalates Action Plan

Di-n-butyl phthalate (CAS 84-74-2)

Phthalates Action Plan

Di-n-hexyl phthalate (CAS 84-75-3)

Phthalates Action Plan

Di-n-octyl phthalate (CAS 117-84-0)

Phthalates Action Plan

Dinonyl phthalate (CAS 84-76-4)

Phthalates Action Plan

CERCLA Hazardous Substance List (40 CFR 302.4)

Bis(2-ethoxyethyl)phthalate (CAS 605-54-9)

Listed.

Bis(2-ethylhexyl)phthalate (CAS 117-81-7)

Listed.

Bis(4-methyl-2-pentyl) phthalate (CAS 84-63-9)

Listed.

Butyl benzyl phthalate (CAS 85-68-7)

Listed.

Diamyl phthalate (CAS 131-18-0)

Listed.

Dicyclohexyl phthalate (CAS 84-61-7)

Listed.

Diethyl phthalate (CAS 84-66-2)

Listed.

Diisobutyl phthalate (CAS 84-69-5)

Listed.

Dimethyl phthalate (CAS 131-11-3)

Listed.

Di-n-butyl phthalate (CAS 84-74-2)

Listed.

Di-n-hexyl phthalate (CAS 84-75-3)

Listed.

Di-n-octyl phthalate (CAS 117-84-0)

Listed.

Dinonyl phthalate (CAS 84-76-4)

Listed.

Isooctane (CAS 540-84-1)

Listed.

SARA 304 Emergency release notification

Not regulated.

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

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Bis(2-ethylhexyl)phthalate	117-81-7	0.1

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

Bis(2-ethoxyethyl)phthalate (CAS 605-54-9)
 Bis(2-ethylhexyl)phthalate (CAS 117-81-7)
 Bis(2-methoxyethyl)phthalate (CAS 117-82-8)
 Bis(2-n-butoxyethyl)phthalate (CAS 117-83-9)
 Dimethyl phthalate (CAS 131-11-3)
 Di-n-butyl phthalate (CAS 84-74-2)
 Isooctane (CAS 540-84-1)

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

Bis(2-ethylhexyl)phthalate (CAS 117-81-7) Listed: January 1, 1988

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

Bis(2-ethylhexyl)phthalate (CAS 117-81-7) Listed: October 24, 2003
 Butyl benzyl phthalate (CAS 85-68-7) Listed: December 2, 2005
 Di-n-butyl phthalate (CAS 84-74-2) Listed: December 2, 2005

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

Di-n-butyl phthalate (CAS 84-74-2) Listed: December 2, 2005
 Di-n-hexyl phthalate (CAS 84-75-3) Listed: December 2, 2005

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

Bis(2-ethylhexyl)phthalate (CAS 117-81-7) Listed: October 24, 2003
 Di-n-butyl phthalate (CAS 84-74-2) Listed: December 2, 2005
 Di-n-hexyl phthalate (CAS 84-75-3) Listed: December 2, 2005

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.**(a)**

Bis(2-ethoxyethyl)phthalate (CAS 605-54-9)
 Bis(2-ethylhexyl)phthalate (CAS 117-81-7)
 Bis(2-methoxyethyl)phthalate (CAS 117-82-8)
 Bis(2-n-butoxyethyl)phthalate (CAS 117-83-9)
 Bis(4-methyl-2-pentyl) phthalate (CAS 84-63-9)
 Butyl benzyl phthalate (CAS 85-68-7)
 Diamyl phthalate (CAS 131-18-0)
 Dicyclohexyl phthalate (CAS 84-61-7)
 Diethyl phthalate (CAS 84-66-2)
 Diisobutyl phthalate (CAS 84-69-5)
 Dimethyl phthalate (CAS 131-11-3)
 Di-n-butyl phthalate (CAS 84-74-2)
 Di-n-hexyl phthalate (CAS 84-75-3)
 Di-n-octyl phthalate (CAS 117-84-0)
 Isooctane (CAS 540-84-1)

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)	No
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	08-30-2014
Revision date	11-21-2017
Version #	02
NFPA ratings	Health: 2 Flammability: 3 Instability: 0

Disclaimer

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded SDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

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Revision information

Composition / Information on Ingredients: Ingredients