

SAFETY DATA SHEET

1. Identification

Product identifier	Tri-o-cresyl phosphate Solut	ion
Other means of identification		
Item	S-13631J4	
Recommended use	For Laboratory Use Only	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/	Distributor information	
Manufacturer		
Company name Address	Chem Service, Inc. 660 Tower Lane West Chester, PA 19380 United States	
Telephone	Toll Free Direct	800-452-9994 610-692-3026
Website E-mail	www.chemservice.com info@chemservice.com	
Emergency phone number	Chemtrec US Chemtrec outside US	800-424-9300 +1 703-527-3887
2. Hazard(s) identification		

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



Signal word



Hazard statement

Precautionary statement Prevention Highly flammable liquid and vapor. Fatal if swallowed. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of damaging fertility. Causes damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

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. Use only outdoors or in a well-ventilated area. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response	If swallowed: Immediately call a poison center/doctor. 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. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. Specific treatment (see this label). Rinse mouth. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: 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	0.9% of the mixture consists of component(s) of unknown acute oral toxicity. 0.9% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 0.9% 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	%
n-Hexane		110-54-3	>99%
Tri-o-cresyl phosphate		78-30-8	0.1

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

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. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
Most important symptoms/effects, acute and delayed	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. May cause redness and pain. Prolonged exposure may cause chronic effects.
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. In case of shortness of breath, give oxygen. Keep victim warm. 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 (CO2). 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 meas	sures
Personal precautions, protective equipment and emergency procedures	Immediately evacuate personnel to safe areas. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. 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). 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.
	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.
	Small Spills: 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. 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. Do not breathe mist or vapor. Do not taste or swallow. 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/perso	onal protection

Occupational exposure limits

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

Components	Туре	Value	
n-Hexane (CAS 110-54-3)	PEL	1800 mg/m3	
		500 ppm	
Tri-o-cresyl phosphate (CAS 78-30-8)	PEL	0.1 mg/m3	

		Туре		Va	lue
n-Hexane (CAS 110-54-3)		TWA			ppm
Tri-o-cresyl phosphate (CAS 78-30-8)		TWA		0.1	I mg/m3
US. NIOSH: Pocket Guide	e to Chemical H				
Components		Туре		Va	lue
n-Hexane (CAS 110-54-3)		TWA			0 mg/m3 ppm
Tri-o-cresyl phosphate (CAS 78-30-8)		TWA			l mg/m3
ological limit values					
ACGIH Biological Exposu Components	ire Indices Value		Determinant	Specimen	Sampling Time
				•	*
n-Hexane (CAS 110-54-3)	0.4 mg/i		2,5-Hexanedio n, without hydrolysis	Urine	*
* - For sampling details, ple	ease see the sou	irce docu	iment.		
posure guidelines					
US - California OELs: Ski	n designation				
n-Hexane (CAS 110-5-				e absorbed throu	
Tri-o-cresyl phosphate US - Minnesota Haz Subs	· · · ·	ion appl		e absorbed throu	gh the skin.
Tri-o-cresyl phosphate US - Tennesse OELs: Ski	· /		Skin de	esignation applie	PS.
Tri-o-cresyl phosphate US ACGIH Threshold Lim	· /	designa		e absorbed throu	gh the skin.
n-Hexane (CAS 110-5				e absorbed throu e absorbed throu	
Tri-o-creevl nhoenhata	(07070-00-0)	sarde. S			
Tri-o-cresyl phosphate US NIOSH Pocket Guide	to Chemical Ha				
Tri-o-cresyl phosphate US NIOSH Pocket Guide to Tri-o-cresyl phosphate		20103.0	•	e absorbed throu	gh the skin.
US NIOSH Pocket Guide	(CAS 78-30-8) Explosion-p changes pe applicable, maintain ain established	proof gen er hour) s use proc borne le , maintai	Can be eral and local exha hould be used. Ve ess enclosures, lo vels below recomn	aust ventilation. ntilation rates sh cal exhaust vent nended exposure o an acceptable	gh the skin. Good general ventilation (typically 10 air ould be matched to conditions. If ilation, or other engineering controls to e limits. If exposure limits have not been level. Eye wash facilities and emergency
US NIOSH Pocket Guide f Tri-o-cresyl phosphate propriate engineering ntrols	(CAS 78-30-8) Explosion-p changes pe applicable, maintain ain established shower mus	proof gen er hour) s use proc borne le , maintai st be ava sonal pr	Can be eral and local exha hould be used. Ve ess enclosures, lov vels below recomn n airborne levels to ilable when handlin otective equipme	aust ventilation. ntilation rates sh cal exhaust vent nended exposurd o an acceptable ng this product. nt	Good general ventilation (typically 10 air ould be matched to conditions. If ilation, or other engineering controls to e limits. If exposure limits have not been
US NIOSH Pocket Guide t Tri-o-cresyl phosphate propriate engineering ntrols	(CAS 78-30-8) Explosion-p changes pe applicable, maintain ain established shower mus	proof gen er hour) s use proc borne le , maintai st be ava sonal pr	Can be eral and local exha hould be used. Ve ess enclosures, lov vels below recomn n airborne levels to ilable when handli	aust ventilation. ntilation rates sh cal exhaust vent nended exposurd o an acceptable ng this product. nt	Good general ventilation (typically 10 air ould be matched to conditions. If ilation, or other engineering controls to e limits. If exposure limits have not been
US NIOSH Pocket Guide f Tri-o-cresyl phosphate propriate engineering ntrols	(CAS 78-30-8) Explosion-p changes pe applicable, maintain ain established shower mus es, such as per Wear safet	proof gen er hour) s use proc borne le , maintai st be ava sonal pr y glasses	Can be eral and local exha hould be used. Ve ess enclosures, lov vels below recomn n airborne levels to ilable when handlin otective equipme	aust ventilation. (ntilation rates sh cal exhaust vent hended exposure o an acceptable ng this product. nt (or goggles).	Good general ventilation (typically 10 air ould be matched to conditions. If ilation, or other engineering controls to e limits. If exposure limits have not been
US NIOSH Pocket Guide f Tri-o-cresyl phosphate propriate engineering ntrols	(CAS 78-30-8) Explosion-p changes pe applicable, maintain air established shower mus es, such as per Wear safet Wear appro	proof gen r hour) s use proc borne le borne le b	Can be eral and local exha hould be used. Ve ess enclosures, lov vels below recomm n airborne levels to ilable when handlin otective equipme s with side shields (hemical resistant gl	aust ventilation. (ntilation rates sh cal exhaust vent bended exposure o an acceptable ng this product. nt (or goggles).	Good general ventilation (typically 10 air ould be matched to conditions. If ilation, or other engineering controls to e limits. If exposure limits have not been
US NIOSH Pocket Guide f Tri-o-cresyl phosphate propriate engineering ntrols	(CAS 78-30-8) Explosion-p changes pe applicable, maintain ain established shower mus es, such as per Wear safety Wear appro If engineeri limits (wher	proof gen er hour) s use proc borne le maintai st be ava sonal pr glasses opriate ch opriate ch ng contro e applica	Can be eral and local exha hould be used. Ve ess enclosures, lov vels below recomn n airborne levels to ilable when handlin otective equipme with side shields of nemical resistant gl nemical resistant cl bls do not maintain able) or to an accept	aust ventilation. (ntilation rates sh cal exhaust vent bended exposure o an acceptable ng this product. nt (or goggles). oves. othing. airborne concer otable level (in c	Good general ventilation (typically 10 air iould be matched to conditions. If ilation, or other engineering controls to e limits. If exposure limits have not been level. Eye wash facilities and emergency ntrations below recommended exposure puntries where exposure limits have not
US NIOSH Pocket Guide f Tri-o-cresyl phosphate propriate engineering ntrols	 (CAS 78-30-8) Explosion-pchanges peapplicable, maintain air established shower musters, such as perawar safety Wear safety Wear appropriate the stable of the st	proof gen r hour) s use proc borne le borne le , maintai st be ava sonal pr glasses opriate ch opriate ch opriate ch ng contro e applica lished), a	Can be eral and local exha hould be used. Ve ess enclosures, lov vels below recomn n airborne levels to ilable when handlin otective equipme s with side shields of nemical resistant glue nemical resistant closs do not maintain	aust ventilation. (ntilation rates sh cal exhaust vent bended exposure of an acceptable ng this product. nt (or goggles). oves. othing. airborne concer otable level (in c ator must be wo	Good general ventilation (typically 10 air iould be matched to conditions. If ilation, or other engineering controls to e limits. If exposure limits have not been level. Eye wash facilities and emergency ntrations below recommended exposure ountries where exposure limits have not m.

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Appearance	
Physical state	Liquid.
Form	Liquid
Color	Not available.
Odor	Not available.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	-137.74 °F (-94.3 °C) estimated

Initial boiling point and boiling range	155.66 °F (68.7 °C) estimated
Flash point	-7.0 °F (-21.7 °C) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	202.64 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	437 °F (225 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	0.66 g/cm3 estimated
Flammability class	Flammable IB estimated
Specific gravity	0.66 estimated
10. Stability and reactivity	
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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

Ingestion	Fatal if swallowed.
Inhalation	Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Prolonged inhalation may be harmful. May cause damage to organs by inhalation.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Information on toxicological ef	fects

Acute toxicity	Fatal if swallowed. Narcotic effects. Expected to be a low hazard for usual industrial or commercial handling by trained personnel.	
Components	Species Test Results	
n-Hexane (CAS 110-54-3)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
		> 5 ml/kg

Components	Species		Test Results
Inhalation LC50	Mouse		48000 ppm, 4 Hours
2000	Rat		> 5000 ppm, 24 Hours
	Nat		> 31.86 mg/l
			73860 ppm, 4 Hours
Oral			
LD50	Rat		24 mg/kg
			24 ml/kg
	Wistar rat		49 mg/kg
Tri-o-cresyl phosphate (CAS 78-3	0-8)		
Acute			
Dermal			
LD50	Rabbit		3.7 g/kg
Inhalation			
LC50	Rat		> 11.1 mg/l, 1 Hours
Oral	Det		1100
LD50	Rat		1160 mg/kg
* Estimates for product may b	e based on ad	lditional component data not shown.	
Skin corrosion/irritation	Causes skin	irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.		
Respiratory or skin sensitizatio	n		
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	This product	t is not considered to be a carcinogen by I.	ARC, ACGIH, NTP, or OSHA.
US. OSHA Specifically Reg Not listed.	ulated Substa	nces (29 CFR 1910.1001-1050)	
Reproductive toxicity	Suspected of damaging fertility.		
Specific target organ toxicity - single exposure	Narcotic effects.		
Specific target organ toxicity - repeated exposure	Causes damage to organs through prolonged or repeated exposure.		
Aspiration hazard	Not available	e.	
Chronic effects	Prolonged inhalation may be harmful. Causes damage to organs through prolonged or repeated exposure.		
12. Ecological information	า		
Ecotoxicity		atic life with long lasting effects. Accumula	ation in aquatic organisms is expected.
Components	·	Species	Test Results
n-Hexane (CAS 110-54-3)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promela	is) 2.101 - 2.981 mg/l, 96 hours
Tri-o-cresyl phosphate (CAS Aquatic	78-30-8)		
Crustacea	EC50	Water flea (Daphnia magna)	2.3 - 4.5 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.21 - 0.32 mg/l, 96 hours
* Estimates for product may b	e based on ad	lditional component data not shown.	
Persistence and degradability		vailable on the degradability of this produc	` t

Bioaccumulative potential No data available.

Partition coefficient n-oc	ctanol / water (log Kow)	
Tri-o-cresyl phosphate	5.11	
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 considerat	tions	
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material	

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	UN1208
UN proper shipping name	Hexanes, solution, MARINE POLLUTANT
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	
Environmental hazards	
Marine pollutant	Yes
•	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	UN1208
UN proper shipping name	Hexanes solution
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	П
Environmental hazards	No.
ERG Code	3H
	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo	Allowed.
aircraft	
Cargo aircraft only	Allowed.
IMDG	
UN number	UN1208
UN proper shipping name	HEXANES SOLUTION, MARINE POLLUTANT
Transport hazard class(es)	······································
Class	3
Subsidiary risk	-
Packing group	П
Environmental hazards	
Marine pollutant	Yes
EmS	F-E, S-D
	Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Not available. Annex II of MARPOL 73/78 and the IBC Code

DOT





15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List. TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) n-Hexane (CAS 110-54-3) Listed. Tri-o-cresyl phosphate (CAS 78-30-8) Listed.

SARA 304 Emergency release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

Hazard categories

SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.	
n-Hexane	110-54-3	>99%	

Other federal regulations

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

n-Hexane (CAS 110-54-3)

Tri-o-cresyl phosphate (CAS 78-30-8)

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

Not regulated.

Safe Drinking Water Act Not regulated. (SDWA)

US state regulations

US. Massachusetts RTK - Substance List

n-Hexane (CAS 110-54-3)

Tri-o-cresyl phosphate (CAS 78-30-8) US. New Jersey Worker and Community Right-to-Know Act

n-Hexane (CAS 110-54-3)

US. Pennsylvania RTK - Hazardous Substances

n-Hexane (CAS 110-54-3) Tri-o-cresyl phosphate (CAS 78-30-8)

US. Rhode Island RTK

n-Hexane (CAS 110-54-3) Tri-o-cresyl phosphate (CAS 78-30-8)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

500 LBS

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)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
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)	Yes
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	05-13-2014
Version #	01
NFPA ratings	Health: 2 Flammability: 3 Instability: 0

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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