

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. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe 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 swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin: Wash with plenty of water. 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. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Collect spillage.

Storage

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

Combustible. 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

NOTE: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The container label may not include the OSHA label elements listed in this document. Always carefully review the entire SDS and the product label prior to use in the workplace.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Hexane		110-54-3	20 - < 50
Naphtha (petroleum), Hydrotreated Light		64742-49-0	20 - < 50
Distillates (petroleum), Hydrotreated Light		64742-47-8	10 - < 25
Butane		106-97-8	10 - < 20
Propane		74-98-6	10 - < 20
Aluminium (powder)		7429-90-5	5 - < 10
CYCLOHEXANE		110-82-7	1 - < 5
C9-C15 Heavy Aromatic Hydrocarbons		64742-95-6	< 1
Hydrotreated Heavy Naphthenic Distillate (petroleum)		64742-52-5	< 1
Octadecanoic acid		57-11-4	< 1
Benzene		71-43-2	< 0.1
Distillates (petroleum), Hydrotreated Light Naphthenic		64742-53-6	< 0.1
Heptane		142-82-5	< 0.1
Toluene		108-88-3	< 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

Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing 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 immediately.

Ingestion

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.

Most important symptoms/effects, acute and delayed	Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. 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. Keep victim under observation. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Alcohol resistant foam. Dry chemicals. 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	Contents under pressure. Pressurized container may explode when exposed to heat or flame. 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	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.
General fire hazards	Extremely flammable aerosol. Combustible.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Remove all possible sources of ignition in the surrounding 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	Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent entry into waterways, sewer, basements or confined areas. Absorb in vermiculite, dry sand or earth and place into containers. 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. Put material in suitable, covered, labeled containers. 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

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. 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

Level 3 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in tightly closed container. 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 Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Type	Value
Benzene (CAS 71-43-2)	STEL	5 ppm
	TWA	1 ppm

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

Components	Type	Value	Form
Aluminium (powder) (CAS 7429-90-5)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
C9-C15 Heavy Aromatic Hydrocarbons (CAS 64742-95-6)	PEL	400 mg/m ³	
		100 ppm	
CYCLOHEXANE (CAS 110-82-7)	PEL	1050 mg/m ³	
		300 ppm	
Distillates (petroleum), Hydrotreated Light (CAS 64742-47-8)	PEL	400 mg/m ³	
		100 ppm	
Distillates (petroleum), Hydrotreated Light Naphthenic (CAS 64742-53-6)	PEL	5 mg/m ³	Mist.

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

Components	Type	Value	Form
Heptane (CAS 142-82-5)	PEL	2000 mg/m3	
		500 ppm	
Hexane (CAS 110-54-3)	PEL	2000 mg/m3	
		500 ppm	
Hydrotreated Heavy Naphthenic Distillate (petroleum) (CAS 64742-52-5)	PEL	1800 mg/m3	
		500 ppm	Mist.
Naphtha (petroleum), Hydrotreated Light (CAS 64742-49-0)	PEL	5 mg/m3	
		2000 mg/m3	
Propane (CAS 74-98-6)	PEL	500 ppm	
		400 mg/m3	
		100 ppm	
		1800 mg/m3	
		1000 ppm	

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
Benzene (CAS 71-43-2)	Ceiling	25 ppm
	TWA	10 ppm
Toluene (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Aluminium (powder) (CAS 7429-90-5)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Aluminium (powder) (CAS 7429-90-5)	TWA	1 mg/m3	Respirable fraction.
Benzene (CAS 71-43-2)	STEL	2.5 ppm	
	TWA	0.5 ppm	
Butane (CAS 106-97-8)	STEL	1000 ppm	
CYCLOHEXANE (CAS 110-82-7)	TWA	100 ppm	
Distillates (petroleum), Hydrotreated Light Naphthenic (CAS 64742-53-6)	TWA	5 mg/m3	Inhalable fraction.
Heptane (CAS 142-82-5)	STEL	500 ppm	
	TWA	400 ppm	
Hexane (CAS 110-54-3)	TWA	50 ppm	
Hydrotreated Heavy Naphthenic Distillate (petroleum) (CAS 64742-52-5)	TWA	5 mg/m3	Inhalable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Octadecanoic acid (CAS 57-11-4)	TWA	3 mg/m ³	Respirable fraction.
		10 mg/m ³	Inhalable fraction.
Toluene (CAS 108-88-3)	TWA	20 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Aluminium (powder) (CAS 7429-90-5)	TWA	5 mg/m ³	Respirable.
		5 mg/m ³	Welding fume or pyrophoric powder.
		10 mg/m ³	Total
Benzene (CAS 71-43-2)	STEL	1 ppm	
	TWA	0.1 ppm	
Butane (CAS 106-97-8)	TWA	1900 mg/m ³	
		800 ppm	
C9-C15 Heavy Aromatic Hydrocarbons (CAS 64742-95-6)	TWA	400 mg/m ³	
		100 ppm	
CYCLOHEXANE (CAS 110-82-7)	TWA	1050 mg/m ³	
		300 ppm	
Distillates (petroleum), Hydrotreated Light (CAS 64742-47-8)	TWA	100 mg/m ³	
		1800 mg/m ³	
Distillates (petroleum), Hydrotreated Light Naphthenic (CAS 64742-53-6)	Ceiling	1800 mg/m ³	
	STEL	10 mg/m ³	Mist.
Heptane (CAS 142-82-5)	Ceiling	1800 mg/m ³	
	TWA	440 ppm	
Hexane (CAS 110-54-3)	TWA	350 mg/m ³	
		85 ppm	
Hydrotreated Heavy Naphthenic Distillate (petroleum) (CAS 64742-52-5)	Ceiling	180 mg/m ³	
		50 ppm	
Hydrotreated Heavy Naphthenic Distillate (petroleum) (CAS 64742-52-5)	Ceiling	1800 mg/m ³	
		10 mg/m ³	Mist.
Naphtha (petroleum), Hydrotreated Light (CAS 64742-49-0)	TWA	400 mg/m ³	
		100 ppm	
Propane (CAS 74-98-6)	TWA	1800 mg/m ³	
		1000 ppm	
Toluene (CAS 108-88-3)	STEL	560 mg/m ³	
		150 ppm	
		TWA	375 mg/m ³
		100 ppm	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Benzene (CAS 71-43-2)	25 µg/g	S-Phenylmercapturic acid	Creatinine in urine	*
Hexane (CAS 110-54-3)	0.4 mg/l	2,5-Hexanedione, without hydrolysis	Urine	*
Toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*

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

Exposure guidelines

US - California OELs: Skin designation

Benzene (CAS 71-43-2)	Can be absorbed through the skin.
Hexane (CAS 110-54-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Toluene (CAS 108-88-3)	Skin designation applies.
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US ACGIH Threshold Limit Values: Skin designation

Benzene (CAS 71-43-2)	Can be absorbed through the skin.
Hexane (CAS 110-54-3)	Can be absorbed through the skin.

Appropriate engineering controls

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 and safety shower.

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

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece. Chemical respirator with organic vapor cartridge and full facepiece if threshold limits are exceeded.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. 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	Liquid
Physical state	Liquid.
Form	Aerosol.
Color	aluminum
Odor	Solvent.odor
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	-51.36 °F (-46.31 °C) estimated
Initial boiling point and boiling range	361.05 °F (182.81 °C) estimated
Flash point	-30.6 °F (-34.8 °C) estimated
Evaporation rate	> 1 BuAc
Flammability (solid, gas)	Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) 1.4 % estimated

Flammability limit - upper (%) 7.5 % estimated

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 1586.33903 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 531.16 °F (277.31 °C) estimated

Decomposition temperature Not available.

Viscosity Not available.

Other information

Density 6.35947 lbs/gal estimated

Explosive properties Not explosive.

Flammability class Flammable IB estimated

Heat of combustion (NFPA 30B) 38.28 kJ/g estimated

Oxidizing properties Not oxidizing.

Specific gravity 0.76207 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 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents. Chlorine. Fluorine. Nitrates.

Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information**Information on likely routes of exposure**

Inhalation May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.

Skin contact Causes skin irritation.

Eye contact Causes serious eye 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. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways.

Components	Species	Test Results
Aluminium (powder) (CAS 7429-90-5)		
<u>Acute</u>		
Oral		
LD50	Rat	> 2000 mg/kg
Benzene (CAS 71-43-2)		
<u>Acute</u>		
Oral		
LD50	Rat	3306 mg/kg 690 - 1230 mg/kg
C9-C15 Heavy Aromatic Hydrocarbons (CAS 64742-95-6)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 1900 mg/kg, 24 Hours
Inhalation		
<i>Vapor</i>		
LC50	Rat	> 4.96 mg/l, 4 Hours
Oral		
LD50	Rat	14060 mg/kg 4820 mg/kg
CYCLOHEXANE (CAS 110-82-7)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg
Distillates (petroleum), Hydrotreated Light (CAS 64742-47-8)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
Inhalation		
<i>Vapor</i>		
LC50	Rat	> 0.1 mg/l, 8 Hours
Oral		
LD50	Rat	> 5000 mg/kg
Distillates (petroleum), Hydrotreated Light Naphthenic (CAS 64742-53-6)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
Inhalation		
LC50	Rat	> 3.9 mg/l, 4 Hours
Oral		
LD50	Rat	> 2000 mg/kg
Heptane (CAS 142-82-5)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
Inhalation		
<i>Vapor</i>		
LC50	Rat	> 29.29 mg/l, 4 Hours

Components	Species	Test Results
Oral		
LD50	Rat	> 5000 mg/kg
Hexane (CAS 110-54-3)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg, 4 Hours
Inhalation		
<i>Vapor</i>		
LC50	Rat	> 31.86 mg/l, 4 Hours
Oral		
LD50	Rat	28710 mg/kg
Hydrotreated Heavy Naphthenic Distillate (petroleum) (CAS 64742-52-5)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
Inhalation		
LC50	Rat	> 3.9 mg/l, 4 Hours
Oral		
LD50	Rat	> 2000 mg/kg
Naphtha (petroleum), Hydrotreated Light (CAS 64742-49-0)		
Acute		
Dermal		
LD50	Rabbit	> 1900 mg/kg, 24 Hours
Inhalation		
<i>Vapor</i>		
LC50	Rat	> 4.96 mg/l, 4 Hours
Oral		
LD50	Rat	> 2000 mg/kg
Octadecanoic acid (CAS 57-11-4)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
Oral		
LD50	Rat	> 2000 mg/kg
Toluene (CAS 108-88-3)		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg, 24 Hours
Inhalation		
LC50	Rat	12.5 - 28.8 mg/l, 4 Hours
Oral		
LD50	Rat	2.6 g/kg
Skin corrosion/irritation	Causes skin 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 May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Benzene (CAS 71-43-2) 1 Carcinogenic to humans.
Toluene (CAS 108-88-3) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Benzene (CAS 71-43-2) Cancer

US. National Toxicology Program (NTP) Report on Carcinogens

Benzene (CAS 71-43-2) Known To Be Human Carcinogen.
Distillates (petroleum), Hydrotreated Light Naphthenic (CAS 64742-53-6) Known To Be Human Carcinogen.
Hydrotreated Heavy Naphthenic Distillate (petroleum) (CAS 64742-52-5) Known To Be Human Carcinogen.

Reproductive toxicity Suspected of damaging fertility or the unborn child.

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

Specific target organ toxicity - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard May be fatal if swallowed and enters airways.

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

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Components		Species	Test Results
Aluminium (powder) (CAS 7429-90-5)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.16 mg/l, 96 hours
Benzene (CAS 71-43-2)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	8.76 - 15.6 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	7.2 - 11.7 mg/l, 96 hours
C9-C15 Heavy Aromatic Hydrocarbons (CAS 64742-95-6)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	2.7 - 5.1 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	8.8 mg/l, 96 hours
			8.8 mg/l, 96 hours
CYCLOHEXANE (CAS 110-82-7)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	23.03 - 42.07 mg/l, 96 hours
Distillates (petroleum), Hydrotreated Light (CAS 64742-47-8)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	2.7 - 5.1 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.9 mg/l, 96 hours
Heptane (CAS 142-82-5)			
Aquatic			
Fish	LC50	Mozambique tilapia (Tilapia mossambica)	375 mg/l, 96 hours
Hexane (CAS 110-54-3)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	2.101 - 2.981 mg/l, 96 hours

Components	Species	Test Results
Naphtha (petroleum), Hydrotreated Light (CAS 64742-49-0)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia pulex) 2.7 - 5.1 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 8.8 mg/l, 96 hours
		8.8 mg/l, 96 hours
Toluene (CAS 108-88-3)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) 5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Coho salmon,silver salmon (Oncorhynchus kisutch) 8.11 mg/l, 96 hours

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

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Benzene	2.13
Butane	2.89
CYCLOHEXANE	3.44
Heptane	4.66
Hexane	3.9
Octadecanoic acid	8.23
Propane	2.36
Toluene	2.73

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. Contents under pressure. Do not puncture, incinerate or crush. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code D001: Waste Flammable material with a flash point <140 F
D018: Waste Benzene
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. Do not re-use empty containers.

14. Transport information

DOT

UN number	UN1950
UN proper shipping name	Aerosols, flammable, (each not exceeding 1 L capacity), MARINE POLLUTANT (Heptane), Limited Quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
Packing group	Not available.
Environmental hazards	
Marine pollutant	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Special provisions	N82
Packaging exceptions	306
Packaging non bulk	None
Packaging bulk	None

IATA

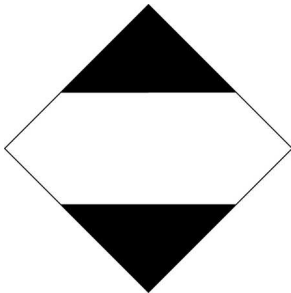
UN number	UN1950
UN proper shipping name	Aerosols, flammable, Limited Quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not available.
Environmental hazards	Yes
ERG Code	10L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

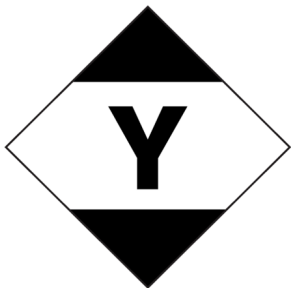
UN number	UN1950
UN proper shipping name	AEROSOLS, MARINE POLLUTANT (Heptane), Limited Quantity
Transport hazard class(es)	
Class	2
Subsidiary risk	-
Packing group	Not available.
Environmental hazards	
Marine pollutant	Yes
EmS	F-D, S-U
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Heptane	

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

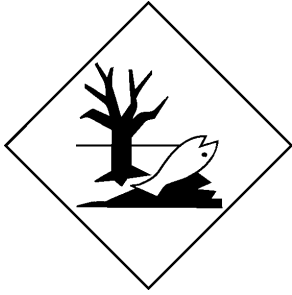
DOT; IMDG



IATA



Marine pollutant



General information

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.

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Benzene (CAS 71-43-2)	Listed.
Butane (CAS 106-97-8)	Listed.
CYCLOHEXANE (CAS 110-82-7)	Listed.
Heptane (CAS 142-82-5)	Listed.
Hexane (CAS 110-54-3)	Listed.
Propane (CAS 74-98-6)	Listed.
Toluene (CAS 108-88-3)	Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Benzene (CAS 71-43-2)	Cancer
	Central nervous system
	Blood
	Aspiration
	Skin
	Eye
	respiratory tract irritation
	Flammability

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

Classified hazard categories

- Flammable (gases, aerosols, liquids, or solids)
- Acute toxicity (any route of exposure)
- Skin corrosion or irritation
- Serious eye damage or eye irritation
- Germ cell mutagenicity
- Carcinogenicity
- Reproductive toxicity
- Specific target organ toxicity (single or repeated exposure)
- Aspiration hazard
- Hazard not otherwise classified (HNOC)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Aluminium (powder)	7429-90-5	5 - < 10
Benzene	71-43-2	< 0.1
CYCLOHEXANE	110-82-7	1 - < 5
Hexane	110-54-3	20 - < 50

Other federal regulations

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

- Benzene (CAS 71-43-2)
- Hexane (CAS 110-54-3)
- Toluene (CAS 108-88-3)

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

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

Safe Drinking Water Act (SDWA) Not regulated.**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

Toluene (CAS 108-88-3) 6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Toluene (CAS 108-88-3) 35 %WV

DEA Exempt Chemical Mixtures Code Number

Toluene (CAS 108-88-3) 594

US state regulations**California Proposition 65****WARNING:** This product can expose you to chemicals including Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.**California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Benzene (CAS 71-43-2) Listed: February 27, 1987

California Proposition 65 - CRT: Listed date/Developmental toxin

Benzene (CAS 71-43-2) Listed: December 26, 1997

Toluene (CAS 108-88-3) Listed: January 1, 1991

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

Benzene (CAS 71-43-2) Listed: December 26, 1997

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

Aluminium (powder) (CAS 7429-90-5)

Benzene (CAS 71-43-2)

Butane (CAS 106-97-8)

C9-C15 Heavy Aromatic Hydrocarbons (CAS 64742-95-6)

Distillates (petroleum), Hydrotreated Light Naphthenic (CAS 64742-53-6)

Hexane (CAS 110-54-3)

Hydrotreated Heavy Naphthenic Distillate (petroleum) (CAS 64742-52-5)

Naphtha (petroleum), Hydrotreated Light (CAS 64742-49-0)

Toluene (CAS 108-88-3)

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)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	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 06-11-2020

Revision date 02-23-2023
Version # 03
HMIS® ratings Health: 3*
Flammability: 4
Physical hazard: 0
NFPA ratings Health: 2
Flammability: 4
Instability: 0

NFPA ratings



Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision information

Product and Company Identification: Product Codes
Hazard(s) identification: Hazard statement
Hazard(s) identification: Hazard(s) not otherwise classified (HNOC)
Hazard(s) identification: Supplemental information
Fire-fighting measures: General fire hazards
Accidental release measures: Methods and materials for containment and cleaning up
Physical & Chemical Properties: Multiple Properties
Transport Information: Material Transportation Information
Transport information: General information
GHS: Classification