

SAFETY DATA SHEET AMSOIL Upper Cylinder Lubricant

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200 and WHMIS 2015, in compliance with the Hazardous Product Act (HPA, as amended) and the requirements of the Hazardous Product Regulations (HPR).

4 Identification	
1. Identification	
Product identifier	
Product name	AMSOIL Upper Cylinder Lubricant
Product number	UCL
Recommended use of the che	emical and restrictions on use
Application	Fuel additive.
Uses advised against	Avoid the formation of mists.
Details of the supplier of the s	afety data sheet
Supplier	AMSOIL INC. 14328-121A Ave Edmonton, AB T5L 2T2 T: 877-830-4769
Manufacturer	AMSOIL INC. One AMSOIL Center, Superior, WI 54880, USA. T: +1 715-392-7101 compliance@amsoil.com
Emergency telephone numbe	<u>r</u>
Emergency telephone	CHEMTREC: Within USA and Canada: 1-800-424-9300 Outside the USA and Canada: +1 703-741-5970 (collect calls accepted) 24/7
2. Hazard(s) identification	
Classification of the substance	e or mixture
OSHA/WHMIS Regulatory Status	This Product is Hazardous under the OSHA Hazard Communication Standard and according to the hazard criteria of the Hazardous Product Regulations.
Physical hazards	Flam. Liq. 4 - H227
Health hazards	Skin Corr. 1B - H314 Eye Dam. 1 - H318 STOT SE 3 - H336 Asp. Tox. 1 - H304
Environmental hazards	Aquatic Chronic 3 - H412
Label elements	
Hazard symbols	
Signal word	Danger

45-70%

AMSOIL Upper Cylinder Lubricant

Hazard statements	H227 Combustible liquid. H314 Causes severe skin burns and eye damage. H336 May cause drowsiness or dizziness. H304 May be fatal if swallowed and enters airways. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	 P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking. P260 Do not breathe vapor/ spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P280 Wear protective gloves, eye and face protection. P301+P310 If swallowed: Immediately call a poison center/ doctor. P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P363 Wash contaminated clothing before reuse. P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/ container in accordance with national regulations.
Contains	Hydrogenated base oil, Alcohols, C12-15 Propoxylated, Aminated

Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

Hydrogenated base oil

CAS number: 64742-47-8

(F.p > 60°C)

Classification

Flam. Liq. 4 - H227 Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 3 - H412

Hydrogenated base oil	30-60%
CAS number: 64742-48-9	
Classification Flam. Liq. 4 - H227 Skin Irrit. 2 - H315	
Eye Irrit. 2A - H319 STOT SE 3 - H336	
Asp. Tox. 1 - H304	
Aquatic Chronic 3 - H412	
Alcohols, C12-15 Propoxylat	ed, Aminated 5 - <10%
CAS number: —	
Classification	
Acute Tox. 4 - H302	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Alkyl aminoester	0.025 - <0.25%
CAS number: —	
Classification Eye Dam. 1 - H318 Skin Sens. 1B - H317 Aquatic Chronic 2 - H411	
The full text for all hazard stat	ements is displayed in Section 16.
Composition comments	The exact percentage is withheld as a trade secret in accordance with 29 CFR 1910.1200.
4. First-aid measures	
Description of first aid measu	res
General information	Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.
Ingestion	Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.
Skin Contact	Rinse with water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.

Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue. If it is suspected that volatile contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.	
Most important symptoms and	l effects, both acute and delayed	
General information	See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.	
Inhalation	A single exposure may cause the following adverse effects: Severe irritation of nose and throat. Symptoms following overexposure may include the following: Corrosive to the respiratory tract.	
Ingestion	May cause chemical burns in mouth, esophagus and stomach. Symptoms following overexposure may include the following: Severe stomach pain. Nausea, vomiting. Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.	
Skin contact	Causes severe burns. Symptoms following overexposure may include the following: Pain or irritation. Redness. Blistering may occur.	
Eye contact	Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes. Redness.	
Indication of immediate medic	al attention and special treatment needed	
	Treat symptomatically.	
Notes for the doctor	Treat symptomatically.	
Notes for the doctor 5. Fire-fighting measures	Treat symptomatically.	
	Treat symptomatically.	
5. Fire-fighting measures	Treat symptomatically. The product is combustible. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.	
5. Fire-fighting measures Extinguishing media	The product is combustible. Extinguish with alcohol-resistant foam, carbon dioxide, dry	
5. Fire-fighting measures Extinguishing media Suitable extinguishing media Unsuitable extinguishing	The product is combustible. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. Do not use water jet as an extinguisher, as this will spread the fire.	
5. Fire-fighting measures Extinguishing media Suitable extinguishing media Unsuitable extinguishing media	The product is combustible. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. Do not use water jet as an extinguisher, as this will spread the fire.	
5. Fire-fighting measures Extinguishing media Suitable extinguishing media Unsuitable extinguishing media Special hazards arising from t	The product is combustible. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. Do not use water jet as an extinguisher, as this will spread the fire. he substance or mixture Containers can burst or explode when heated, due to excessive pressure build-up. Vapors may be ignited by a spark, a hot surface or an ember. Vapors may form explosive mixtures	
5. Fire-fighting measures Extinguishing media Suitable extinguishing media Unsuitable extinguishing media Special hazards arising from t Specific hazards Hazardous combustion	The product is combustible. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. Do not use water jet as an extinguisher, as this will spread the fire. he substance or mixture Containers can burst or explode when heated, due to excessive pressure build-up. Vapors may be ignited by a spark, a hot surface or an ember. Vapors may form explosive mixtures with air. Fire-water run-off in sewers may create fire or explosion hazard. Thermal decomposition or combustion products may include the following substances:	

Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves, that provides a basic level of protection during chemical incidents is defined by the Canada Occupational Health and Safety Regulations, by provincial guidelines on occupational health and safety or by NFPA standards if applicable.	
6. Accidental release measures		
Personal precautions, protective equipment and emergency procedures		
Personal precautions	No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as	

unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Avoid inhalation of vapors and spray/mists. Use suitable respiratory protection if ventilation is inadequate. Use protective equipment appropriate for surrounding materials.

Environmental precautions Environmental precautions Avoid discharge into drains or watercou aquatic environment. Large Spillages: Ir

ns Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills Methods for cleaning up immediately and dispose of waste safely. Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Do not allow material to enter confined spaces, due to the risk of explosion. Approach the spillage from upwind. Small Spillages: Absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Large Spillages: If leakage cannot be stopped, evacuate area. Flush spilled material into an effluent treatment plant, or proceed as follows. Contain and absorb spillage with sand, earth or other non-combustible material. Place waste in labeled, sealed containers. Clean contaminated objects and areas thoroughly, observing environmental regulations. The contaminated absorbent may pose the same hazard as the spilled material. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

7. Handling and storage

Precautions for safe handling

Usage precautions

Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid the formation of mists. The product is combustible. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers. Avoid contact with used product.

Advice on general occupational hygiene	Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.
Conditions for safe storage, in	cluding any incompatibilities
Storage precautions	Store away from incompatible materials (see Section 10). Store in accordance with local regulations. Eliminate all sources of ignition. Keep away from oxidizing materials, heat and flames. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage.
Storage class	Corrosive storage.
Specific end uses(s)	
Specific end use(s)	The identified uses for this product are detailed in Section 1.
8. Exposure controls/Persona	Il protection
Control parameters	
Occupational exposure limits Comments	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.
Under conditions which may g Long-term exposure limit (8-ho Short-term exposure limit (15-	
Exposure controls	
Appropriate engineering controls	Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimize worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimize exposure.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with OSHA 1910.133 and/or the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.6), and any relevant provincial regulation relating to health and safety at work. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and/or the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.9), and be demonstrated to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and bodyAppropriate footwear and additional protective clothing complying with an approved standard
should be worn if a risk assessment indicates skin contamination is possible.

Hygiene measures	Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. Full face mask respirators with replaceable filter cartridges should comply with OSHA 1910.134 and/or the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work. Gas and combination filter cartridges should comply with OSHA 1910.134 and/or the Canadian regulation on health and safety at work. SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134 and/or the Canadian regulation on health and safety at work. SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134 and/or the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation on health and safety at work. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134 and/or the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work.
Environmental exposure	Keep container tightly sealed when not in use.

controls

9. Physical and chemical properties

Information on basic physical	and chemical properties
Appearance	Liquid.
Color	Yellow.
Odor	Mild hydrocarbon.
Odor threshold	Not available.
рН	Not available.
Melting point	Not available.
Initial boiling point and range	Not available.
Flash point	70°C Pensky-Martens closed cup.
Evaporation rate	Not available.
Upper/lower flammability or explosive limits	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	0.8008
Solubility(ies)	Not known.
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	1.89 cSt @ 40°C [ASTM D 445]
Explosive properties	Not considered to be explosive.

Oxidizing properties	Does not meet the criteria for classification as oxidizing.
Pour point	<-60°C
10. Stability and reactivity	
Reactivity	See the other subsections of this section for further details.
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
Possibility of hazardous reactions	The following materials may react strongly with the product: Oxidizing agents.
Conditions to avoid	Avoid heat, flames and other sources of ignition. Containers can burst violently or explode when heated, due to excessive pressure build-up. Static electricity and formation of sparks must be prevented. Do not pressurize, cut, weld, drill, grind or otherwise expose containers to heat or sources of ignition.
Materials to avoid	Oxidizing materials. Acids - oxidizing.
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.
11. Toxicological information	
Information on toxicological ef	fects
Acute toxicity - oral	
Summary	Based on available data the classification criteria are not met.
Notes (oral LD₅₀)	Based on available data the classification criteria are not met.
ATE oral (mg/kg)	6,097.56
Acute toxicity - dermal	
Summary	Based on available data the classification criteria are not met.
Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - inhalation Summary	Based on available data the classification criteria are not met.
-	Based on available data the classification criteria are not met.
Notes (inhalation LC ₅₀)	
Skin corrosion/irritation Summary	Causes severe skin burns and eye damage.
Serious eye damage/irritation Summary	Causes serious eye damage.
Respiratory sensitization Summary	Based on available data the classification criteria are not met.
Respiratory sensitization	Based on available data the classification criteria are not met.
Skin sensitization Summary	Based on available data the classification criteria are not met.
Skin sensitization	Based on available data the classification criteria are not met.

Germ cell mutagenicity	
Summary	Based on available data the classification criteria are not met.
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Carcinogenicity	
Summary	Based on available data the classification criteria are not met.
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	Contains a substance/a group of substances which may cause cancer. IARC Group 1 Carcinogenic to humans.
Reproductive toxicity	
Summary	Based on available data the classification criteria are not met.
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.
Specific target organ toxicity -	single exposure
Summary	May cause drowsiness or dizziness.
STOT - single exposure	STOT SE 3 - H336 May cause drowsiness or dizziness.
Target organs	Central nervous system
Specific target organ toxicity -	repeated exposure
Summary	Based on available data the classification criteria are not met.
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
Aspiration hazard	
Summary	May be fatal if swallowed and enters airways. Pneumonia may be the result if vomited material containing solvents reaches the lungs.
Aspiration hazard	Asp. Tox. 1 - H304 May be fatal if swallowed and enters airways. Pneumonia may be the result if vomited material containing solvents reaches the lungs.
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Corrosive to the respiratory tract. Symptoms following overexposure may include the following: Severe irritation of nose and throat.
Ingestion	May cause chemical burns in mouth, esophagus and stomach. Symptoms following overexposure may include the following: Severe stomach pain. Nausea, vomiting. Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
Skin Contact	Causes severe burns. Symptoms following overexposure may include the following: Pain or irritation. Redness. Blistering may occur.
Eye contact	Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes. Redness.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target Organs	Central nervous system
Toxicological information on ir	ngredients.

Hydrogenated base oil

Acute toxicity - oral	
Notes (oral LD₅₀)	LD_{50} >5000 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
Acute toxicity - dermal	
Notes (dermal LD₅₀)	LD₅₀ >2000 mg/kg, Dermal, Rabbit REACH dossier information. Based on available data the classification criteria are not met.
Acute toxicity - inhalation	
Notes (inhalation LC_{50})	LC_{50} >5.61 mg/l, Inhalation, (4 hours), Rat REACH dossier information. Based on available data the classification criteria are not met.
Skin corrosion/irritation	
Animal data	Dose: 0.5 mL, 4 hours, Rabbit Erythema/eschar score: Well defined erythema (2). Edema score: Slight oedema - edges of area well defined by definite raising (2). REACH dossier information. Irritating.
Serious eye damage/irritatio	on
Serious eye damage/irritation	Based on available data the classification criteria are not met.
Respiratory sensitization	
Respiratory sensitization	Based on available data the classification criteria are not met.
Skin sensitization	
Skin sensitization	Buehler test - Guinea pig: Not sensitizing. REACH dossier information. Based on available data the classification criteria are not met.
Germ cell mutagenicity	
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Carcinogenicity	
Carcinogenicity	NOAEL 0.05 ml/kg, Dermal, Mouse REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity	
Reproductive toxicity - fertility	Two-generation study - NOAEC >20000 mg/m ³ , Inhalation, Rat F1 REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - development	Fetotoxicity: - NOAEL: 23900 mg/m³, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.
Specific target organ toxicit	y - single exposure
STOT - single exposure	STOT SE 3 - H336 May cause drowsiness or dizziness.
Specific target organ toxicit	y - repeated exposure
STOT - repeated exposure	NOAEC 1402 mg/m ³ , Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.
Aspiration hazard	

Aspiration hazard	Aspiration hazard if swallowed.
Aspiration hazaru	Aspiration nazaru ir swalloweu.

12. Ecological information

Toxicity

Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

Hydrogenated base oil

Toxicity	Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.
Acute aquatic toxicity	
Acute toxicity - fish	LL_{50} , 96 hours: 8.2 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EL₅₀, 48 hours: 4.5 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EL₅₀, 72 hours: 3.1 mg/l, Selenastrum capricornutum
Chronic aquatic toxicity	
Chronic toxicity - fish early life stage	LL₅₀, 14 days: 5.2 mg/l, Pimephales promelas (Fat-head Minnow)
Chronic toxicity - aquatic invertebrates	NOELR, 21 days: 16 mg/l, Daphnia magna
co and degradability	

Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Ecological information on ingredients.

Hydrogenated base oil

Persistence and degradability	The product is readily biodegradable.	
Biodegradation	Water - Degradation 77%: 28 days	
Bioaccumulative potential		
Bio-Accumulative Potential	No data available on bioaccumulation.	

Partition coefficient

Not available.

Ecological information on ingredients.

Hydrogenated base oil

Bio-Accumulative Potential No data available on bioaccumulation.

Mobility in soil

Mobility No data available.

Ecological information on ingredients.

Hydrogenated base oil

Mobility

The product contains substances which are insoluble in water and which may spread on water surfaces.

Adsorption/desorption Water - log Koc: 1.78-2.36 @ °C Estimated value. coefficient			
Other adverse effects			
Other adverse effects	None known.		
13. Disposal considerations			
Waste treatment methods			
General information	The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.		
Disposal methods	Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents. Incineration or landfill should only be considered when recycling is not feasible.		
14. Transport information			
UN Number			
UN No. (TDG)	1760		
UN No. (IMDG)	1760		
UN No. (ICAO)	1760		
UN No. (DOT)	UN1760		
UN proper shipping name			
Proper shipping name (TDG)	CORROSIVE LIQUID, N.O.S (CONTAINS Alcohols, C12-15 Propoxylated, Aminated)		
Proper shipping name (IMDG)	CORROSIVE LIQUID, N.O.S. (CONTAINS Alcohols, C12-15 Propoxylated, Aminated)		
Proper shipping name (ICAO)	CORROSIVE LIQUID, N.O.S. (CONTAINS Alcohols, C12-15 Propoxylated, Aminated)		
Proper shipping name (DOT)	CORROSIVE LIQUIDS, N.O.S. (CONTAINS Alcohols, C12-15 Propoxylated, Aminated)		
Transport hazard class(es)			
DOT hazard class	8		
DOT hazard label	8		
TDG class	8		
TDG label(s)	8		
IMDG Class	8		
ICAO class/division	8		

DOT transport labels



Transport labels



Packing group	
TDG Packing Group	II
IMDG packing group	П
ICAO packing group	П
DOT packing group	П
Environmental hazards	
Environmentally Hazardous Su No.	ibstance
Special precautions for user	
EmS	F-A, S-B
DOT reportable quantity	RQ: Naphthalene (660283.9221 lbs), RQ: Benzene (85763.2933 lbs)
Transport in bulk according to Annex II of MARPOL 73/78	Not applicable.

and the IBC Code

15	Pogu	laton	inform	nation	
10.	Reuu	iiaiui v		nauon	

Regulatory ReferencesOSHA Hazard Communication Standard 29 CFR §1910.1200 Hazardous Products Regulation
(SOR/2015-17) Transportation of Dangerous Goods Regulations -SOR/2015-100.

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed or exempt.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

The following ingredients are listed or exempt:

Naphthalene Final CERCLA RQ: 100(45.4) pounds (Kilograms)

Benzene Final CERCLA RQ: 10(4.54) pounds (Kilograms)

Toluene Final CERCLA RQ: 1000(454) pounds (Kilograms)

Ethylbenzene Final CERCLA RQ: 1000(454) pounds (Kilograms)

SARA Extremely Hazardous Substances EPCRA Reportable Quantities None of the ingredients are listed or exempt.

SARA 313 Emission Reporting

The following ingredients are listed or exempt:

Naphthalene

0.1 %

Benzene

0.1 %

Toluene 1.0 %

1.0 /0

Ethylbenzene 0.1 %

CAA Accidental Release Prevention

None of the ingredients are listed or exempt.

FDA - Essential Chemical

None of the ingredients are listed or exempt.

FDA - Precursor Chemical

None of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories

Aspiration hazard Flammable (gases, aerosols, liquids or solids) Serious eye damage or eye irritation Skin corrosion or irritation Specific target organ toxicity (single or repeated exposure)

OSHA Highly Hazardous Chemicals

None of the ingredients are listed or exempt.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins The following ingredients are listed or exempt:

Ethylbenzene Carcinogen.

Benzene. Carcinogen, developmental toxin and reproductive toxin.

Naphthalene Carcinogen.

Toluene Developmental toxin.

California Air Toxics "Hot Spots" (A-I)

The following ingredients are listed or exempt:

Naphthalene

Benzene

Toluene

Ethylbenzene

California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed or exempt.

California Directors List of Hazardous Substances

The following ingredients are listed or exempt:

Naphthalene

Benzene

Toluene

Ethylbenzene

Massachusetts "Right To Know" List

The following ingredients are listed or exempt:

Naphthalene

Benzene

Toluene

Ethylbenzene

Rhode Island "Right To Know" List

The following ingredients are listed or exempt:

Naphthalene

Benzene

Toluene

Ethylbenzene

Minnesota "Right To Know" List

The following ingredients are listed or exempt:

Naphthalene

Benzene

Toluene

Ethylbenzene

New Jersey "Right To Know" List

The following ingredients are listed or exempt:

Naphthalene

Benzene

Toluene

Ethylbenzene

Pennsylvania "Right To Know" List

The following ingredients are listed or exempt:

Naphthalene

Benzene

Toluene

Ethylbenzene

Inventories

Canada - DSL/NDSL

All the ingredients are listed or exempt.

US - TSCA

All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

16. Other information				
Abbreviations and acronyms used in the safety data sheet	C.A.S. = Chemical Abstracts Service; E.C. No = European Commission number; GHS = Globally Harmonised System; OSHA = Occupational Safety and Health Administration; WHMIS = Workplace Hazardous Materials Information System; DOT = Department of Transport; TDG = Transport of Dangerous Goods Regulations; IMDG = International Maritime Dangerous Goods; IATA = International Air Transport Association; SARA = Superfund Amendments and Reauthorization Act; CERCLA = Comprehensive Environmental; EPCRA = Emergency Planning and Community Right-to-Know Act; TSCA = Toxic Substances Control Act; LD/LC/EC = Lethal Dose,Lethal Concentration/Effect Concentration for 50% of population; NOEC = No Overall Effect Concentration; NOEL = No Overall Effect Level; REACH = Registration, Evaluation, Authorisation & Restriction of Chemicals; STOT-RE = Single Target Organ Toxicity - Repeat Exposure; STOT-SE= Specific Target Organ Toxicity - Single Exposure; PBT = Persistent, Bioaccumulative, Toxic; vPvB = Very Persistent, Very Bioaccumulative.			
Classification abbreviations and acronyms	Aquatic Chronic = Hazardous to the aquatic environment (chronic) Asp. Tox. = Aspiration hazard Eye Irrit. = Eye irritation Flam. Liq. = Flammable liquid Skin Irrit. = Skin irritation STOT SE = Specific target organ toxicity-single exposure			
Key literature references and sources for data	Source: European Chemicals Agency, http://echa.europa.eu/			
Training advice	Read and follow manufacturer's recommendations. Only trained personnel should use this material.			
Revision date	7/2/2019			
Revision	1			
Supersedes date	6/5/2018			
SDS No.	7680			
Hazard statements in full	 H227 Combustible liquid. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. 			

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.