

### SAFETY DATA SHEET Synthetic Gear Lube SAE 80W-140

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).

1. Identification		
Product identifier		
Product name	Synthetic Gear Lube SAE 80W-140	
Product number	FGO	
Recommended use of the chemical and restrictions on use		
Application	Lubricating oil.	
Uses advised against	Avoid the formation of mists.	
Details of the supplier of the safety 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 number		
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	Not Classified	
Health hazards	Eye Irrit. 2B - H320 Skin Sens. 1 - H317	
Environmental hazards	Aquatic Acute 3 - H402 Aquatic Chronic 3 - H412	
Label elements Hazard symbols		
Signal word	Warning	

Hazard statements	H320 Causes eye irritation. H317 May cause an allergic skin reaction. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	<ul> <li>P261 Avoid breathing vapor/ spray.</li> <li>P264 Wash contaminated skin thoroughly after handling.</li> <li>P272 Contaminated work clothing must not be allowed out of the workplace.</li> <li>P273 Avoid release to the environment.</li> <li>P280 Wear protective gloves, eye and face protection.</li> <li>P302+P352 If on skin: Wash with plenty of water.</li> <li>P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</li> <li>P362+P364 Take off contaminated clothing and wash it before reuse.</li> <li>P501 Dispose of contents/ container in accordance with national regulations.</li> </ul>
Contains	Amines, C12-14-tert-alkyl

### Other hazards

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

3. Composition/information on ingr	edients	
Mixtures		
Polyisobutylene		15 - <40%
CAS number: 9003-27-4		
Classification		
Eye Irrit. 2B - H320		
Amines, C12-14-tert-alkyl		0.5 - <1.5%
CAS number: 68955-53-3		
M factor (Acute) = 1	M factor (Chronic) = 1	
Classification		
Flam. Liq. 4 - H227		
Acute Tox. 4 - H302		
Acute Tox. 3 - H311		
Acute Tox. 2 - H330		
Skin Corr. 1B - H314		
Eye Dam. 1 - H318		
Skin Sens. 1A - H317		
Aquatic Acute 1 - H400		
Aquatic Chronic 1 - H410		

(Z)-Octadec-9-enylamine	0.1 - <1%
CAS number: 112-90-3	
M factor (Acute) = 10	M factor (Chronic) = 10
Classification	
Acute Tox, 4 - H302	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
STOT SE 3 - H335	
STOT RE 2 - H373	
Asp. Tox. 1 - H304	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	
1	
The full text for all hazard sta	atements 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	ures
General information	Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.
Ingestion	Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.
Skin Contact	It is important to remove the substance from the skin immediately. In the event of any sensitization symptoms developing, ensure further exposure is avoided. Remove

if symptoms are severe or persist after washing.
contamination with soap and water or recognized skin cleansing agent. Get medical attention if symptoms are severe or persist after washing

Eye contactRemove any contact lenses and open eyelids wide apart. Rinse with water. Get medical<br/>attention if any discomfort continues.

Protection of first aiders First aid personnel should wear appropriate protective equipment during any rescue.

Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.	
Inhalation	No specific symptoms known.	
Ingestion	May cause sensitization or allergic reactions in sensitive individuals.	
Skin contact	May cause skin sensitization or allergic reactions in sensitive individuals.	
Eye contact	No specific symptoms known. May be slightly irritating to eyes.	
Indication of immediate medical attention and special treatment needed		
Notes for the doctor	Treat symptomatically. May cause sensitization or allergic reactions in sensitive individuals.	

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.	
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.	
Special hazards arising from the substance or mixture		
Specific hazards	Containers can burst or explode when heated, due to excessive pressure build-up. Contains Hydrocarbons. The product is immiscible with water and will spread on the water surface.	
Hazardous combustion products	Hydrocarbons. Carbon monoxide (CO). Carbon dioxide (CO2).	
Advice for firefighters		
Protective actions during firefighting	Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.	
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 measure	15	
Personal precautions, protectiv	ve 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 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. Avoid contact with skin and eyes. Use protective equipment appropriate for surrounding materials.	
Environmental precautions		

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment.

### Methods and material for containment and cleaning up

Methods for cleaning up Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Small Spillages: Absorb spillage with sand or other inert absorbent. Collect and place in suitable waste disposal containers and seal securely. 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 area with plenty of water. Wash thoroughly after dealing with a spillage. 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 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. The product contains a sensitizing substance. Persons susceptible to allergic reactions should not handle this product. Keep container tightly sealed when not in use. Avoid the formation of mists. 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	ncluding any incompatibilities
Storage precautions	Store away from incompatible materials (see Section 10). Store in accordance with local regulations. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Utilize retaining walls to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent.
Storage class	Chemical storage.
Specific end uses(s)	
Specific end use(s)	The identified uses for this product are detailed in Section 1.
8. Exposure controls/Person	al 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 Long-term exposure limit (8-h Short-term exposure limit (15	, <b>-</b>
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 body protection	Appropriate 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. 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. SOR/86-304, Part XII (12.7), and any relevant provincial 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 controls	Keep container tightly sealed when not in use.	
9. Physical and chemical properties		
Information on basic physical	and chemical properties	
Appearance	Liquid.	
Color	Yellow.	
Odor	Sulfur. Mild.	
Odor threshold	Not available.	

216°C Cleveland open cup. [ASTM D 92]

Not available.

Not available.

Not available.

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Melting point

Flash point

Initial boiling point and range

Evaporation rate	Not available.
Upper/lower flammability or explosive limits	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	0.8849
Solubility(ies)	Not known.
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	244.8 cSt @ 40°C 26.3 cSt @ 100°C [ASTM D 445]
Explosive properties	Not considered to be explosive.
Oxidizing properties	Does not meet the criteria for classification as oxidizing.
Fire point	224°C Cleveland open cup. [ASTM D 92]
Pour point	-43°C [ASTM D 97]
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	No potentially hazardous reactions known.
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.
Conditions to avoid Materials to avoid	There are no known conditions that are likely to result in a hazardous situation. Oxidizing agents. Acids - oxidizing.
Materials to avoid Hazardous decomposition	Oxidizing agents. Acids - oxidizing. Does not decompose when used and stored as recommended. Thermal decomposition or
Materials to avoid Hazardous decomposition products	Oxidizing agents. Acids - oxidizing. Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.
Materials to avoid Hazardous decomposition products 11. Toxicological information Information on toxicological ef Acute toxicity - oral	Oxidizing agents. Acids - oxidizing. Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.           fects
Materials to avoid Hazardous decomposition products 11. Toxicological information Information on toxicological ef Acute toxicity - oral Notes (oral LD <sub>50</sub> )	Oxidizing agents. Acids - oxidizing. Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.
Materials to avoid Hazardous decomposition products 11. Toxicological information Information on toxicological ef Acute toxicity - oral	Oxidizing agents. Acids - oxidizing. Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.           fects
Materials to avoid Hazardous decomposition products 11. Toxicological information Information on toxicological ef Acute toxicity - oral Notes (oral LD <sub>50</sub> ) Acute toxicity - dermal	Oxidizing agents. Acids - oxidizing. Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.  fects Based on available data the classification criteria are not met.
Materials to avoid Hazardous decomposition products 11. Toxicological information Information on toxicological ef Acute toxicity - oral Notes (oral LD <sub>50</sub> ) Acute toxicity - dermal Notes (dermal LD <sub>50</sub> )	Oxidizing agents. Acids - oxidizing. Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.  fects Based on available data the classification criteria are not met. Based on available data the classification criteria are not met.

ATE inhalation (vapours mg/l)	54.12	
Skin corrosion/irritation Animal data	Based on available data the classification criteria are not met.	
Serious eye damage/irritation 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	May cause skin sensitization or allergic reactions in sensitive individuals.	
Germ cell mutagenicity Genotoxicity - in vitro	Based on available data the classification criteria are not met.	
Carcinogenicity Carcinogenicity	Based on available data the classification criteria are not met.	
IARC carcinogenicity	None of the ingredients are listed or exempt.	
Reproductive toxicity 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		
<u> </u>		
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.	
Specific target organ toxicity -	repeated exposure	
Specific target organ toxicity -	repeated exposure	
Specific target organ toxicity - STOT - repeated exposure Aspiration hazard	repeated exposure Not classified as a specific target organ toxicant after repeated exposure.	
Specific target organ toxicity - STOT - repeated exposure Aspiration hazard Aspiration hazard	repeated exposure Not classified as a specific target organ toxicant after repeated exposure. Based on available data the classification criteria are not met. The severity of the symptoms described will vary dependent on the concentration and the	
Specific target organ toxicity - STOT - repeated exposure Aspiration hazard Aspiration hazard General information	repeated exposure         Not classified as a specific target organ toxicant after repeated exposure.         Based on available data the classification criteria are not met.         The severity of the symptoms described will vary dependent on the concentration and the length of exposure.	
Specific target organ toxicity - STOT - repeated exposure Aspiration hazard Aspiration hazard General information Inhalation	repeated exposure         Not classified as a specific target organ toxicant after repeated exposure.         Based on available data the classification criteria are not met.         The severity of the symptoms described will vary dependent on the concentration and the length of exposure.         No specific symptoms known.	
Specific target organ toxicity - STOT - repeated exposure Aspiration hazard Aspiration hazard General information Inhalation Ingestion	<ul> <li>repeated exposure</li> <li>Not classified as a specific target organ toxicant after repeated exposure.</li> <li>Based on available data the classification criteria are not met.</li> <li>The severity of the symptoms described will vary dependent on the concentration and the length of exposure.</li> <li>No specific symptoms known.</li> <li>May cause sensitization or allergic reactions in sensitive individuals.</li> </ul>	
Specific target organ toxicity - STOT - repeated exposure Aspiration hazard Aspiration hazard General information Inhalation Ingestion Skin Contact	<ul> <li>Tepeated exposure</li> <li>Not classified as a specific target organ toxicant after repeated exposure.</li> <li>Based on available data the classification criteria are not met.</li> <li>The severity of the symptoms described will vary dependent on the concentration and the length of exposure.</li> <li>No specific symptoms known.</li> <li>May cause sensitization or allergic reactions in sensitive individuals.</li> <li>May cause skin sensitization or allergic reactions in sensitive individuals.</li> </ul>	
Specific target organ toxicity - STOT - repeated exposure Aspiration hazard Aspiration hazard General information Inhalation Ingestion Skin Contact Eye contact	<ul> <li>Tepeated exposure</li> <li>Not classified as a specific target organ toxicant after repeated exposure.</li> <li>Based on available data the classification criteria are not met.</li> <li>The severity of the symptoms described will vary dependent on the concentration and the length of exposure.</li> <li>No specific symptoms known.</li> <li>May cause sensitization or allergic reactions in sensitive individuals.</li> <li>May cause skin sensitization or allergic reactions in sensitive individuals.</li> <li>No specific symptoms known.</li> </ul>	
Specific target organ toxicity - STOT - repeated exposure Aspiration hazard Aspiration hazard General information Inhalation Ingestion Skin Contact Eye contact Route of exposure	<ul> <li>Prepeated exposure</li> <li>Not classified as a specific target organ toxicant after repeated exposure.</li> <li>Based on available data the classification criteria are not met.</li> <li>The severity of the symptoms described will vary dependent on the concentration and the length of exposure.</li> <li>No specific symptoms known.</li> <li>May cause sensitization or allergic reactions in sensitive individuals.</li> <li>May cause skin sensitization or allergic reactions in sensitive individuals.</li> <li>No specific symptoms known.</li> <li>Ingestion Inhalation Skin and/or eye contact</li> </ul>	

### Amines, C12-14-tert-alkyl

Acute toxicity - oral Acute toxicity oral (LD<sub>50</sub> 612.0 mg/kg)

Species	Rat	
Notes (oral LD₅₀)	REACH dossier information. Harmful if swallowed.	
ATE oral (mg/kg)	612.0	
Acute toxicity - dermal		
Acute toxicity dermal (LD₅ mg/kg)	251.0	
Species	Rat	
Notes (dermal LD <sub>50</sub> )	REACH dossier information. Toxic in contact with skin.	
ATE dermal (mg/kg)	251.0	
Acute toxicity - inhalation		
Notes (inhalation LC₅₀)	Fatal if inhaled.	
ATE inhalation (vapours mg/l)	0.5	
Skin corrosion/irritation		
Skin corrosion/irritation	Corrosive to skin.	
Animal data	Dose: 0.5ml, 4 hours, Rabbit Primary dermal irritation index: 7.3 REACH dossier information.	
Serious eye damage/irritati	Serious eye damage/irritation	
Serious eye damage/irritation	Dose: 0.1ml, 30 seconds, Rabbit REACH dossier information. Causes serious eye damage.	
Skin sensitization		
Skin sensitization	Buehler test - Guinea pig: Sensitizing. REACH dossier information. May cause an allergic skin reaction.	
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.	
Reproductive toxicity		
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 5 mg/kg/day, Dermal, Rat REACH dossier information. Based on available data the classification criteria are not met.	
	(Z)-Octadec-9-enylamine	
Acute toxicity - oral		
ATE oral (mg/kg)	500.0	
12. Ecological information		

Toxicity

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

Ecological information on ingredients.

### Amines, C12-14-tert-alkyl

	Acute aquatic toxicity			
	LE(C) <sub>50</sub>	$0.1 < L(E)C50 \le 1$		
	M factor (Acute)	1		
	Acute toxicity - fish	LC₅₀, 96 hours: 1.3 mg/l, Oncorhynchus mykiss (Rainbow trout) REACH dossier information.		
	Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 2.5 mg/l, Daphnia magna REACH dossier information.		
	Acute toxicity - aquatic plants	EC₅₀, 72 hours: 0.44 mg/l, Selenastrum capricornutum REACH dossier information.		
	Chronic aquatic toxicity			
	NOEC	0.01 < NOEC ≤ 0.1		
	Degradability	Non-rapidly degradable		
	M factor (Chronic)	1		
	Chronic toxicity - fish early life stage	NOEC, 96 days: 0.078 mg/l, Oncorhynchus mykiss (Rainbow trout) REACH dossier information.		
	(Z)-Octadec-9-enylamine			
	Acute aquatic toxicity			
	M factor (Acute)	10		
	Chronic aquatic toxicity			
	M factor (Chronic)	10		
	and degradability			
		radability of the product is not known.		
Ecological i	nformation on ingredients.			
		Amines, C12-14-tert-alkyl		
	Stability (hydrolysis)	pH9, pH7, pH4 - Half-life : > 1 year @ 25°C REACH dossier information.		
	Biodegradation	Water - Degradation 22%: 28 days REACH dossier information.		
Bioaccumulative potential				
Bio-Accumu	Ilative Potential No data	available on bioaccumulation.		
Partition co	efficient Not avai	lable.		
Ecological information on ingredients.				
		Amines, C12-14-tert-alkyl		
	Partition coefficient	log Pow: 2.9 REACH dossier information.		
Mobility in soil				
Mobility	No data	available.		
Ecological information on ingredients.				

	Mobility	Slightly soluble in water.		
	Adsorption/desor coefficient	btion Soil - Log Koc: 4.01 @ 20°C REACH dossier information.		
	Surface tension	47.4 mN/m @ 22°C REACH dossier information.		
Other adver	rse effects			
Other adver	rse effects	None known.		
13. Disposa	I considerations			
Waste treat	ment methods			
General info	ormation	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 mo	əthods	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. Transpo	ort information			
General		The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT, TDG).		
UN Number	[			
UN No. (Inte	ernational)	Not applicable.		
UN proper s	shipping name			
Proper ship (Internation		Not applicable.		
Transport h	azard class(es)			
Transport labels No transport warning sign required.				
Packing gro	pup			
Packing gro	oup (International)	Not applicable.		
Environmental hazards				
Environmentally Hazardous Substance No.				
Special pre	cautions for user			
Not applical	ble.			
DOT TIH Zo	one	Not applicable.		

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

15. Regulatory information

Regulatory ReferencesOSHA Hazard Communication Standard 29 CFR §1910.1200 Hazardous Products Regulation<br/>(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

The following ingredients are listed or exempt:

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

The following ingredients are listed or exempt:

#### 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:

#### **CAA Accidental Release Prevention**

The following ingredients are listed or exempt:

### SARA (311/312) Hazard Categories

Respiratory or skin sensitization Serious eye damage or eye irritation

### **OSHA Highly Hazardous Chemicals**

The following ingredients are listed or exempt:

#### **US State Regulations**

#### California Proposition 65 Carcinogens and Reproductive Toxins

The following ingredients are listed or exempt:

# Ethylene oxide Carcinogen, developmental toxin and reproductive toxin.

1,4-dioxane Carcinogen.

Methyloxirane Carcinogen.

Ethyl acrylate Carcinogen.

Ethylbenzene Carcinogen.

Benzene. Carcinogen, developmental toxin and reproductive toxin.

Naphthalene Carcinogen.

California Air Toxics "Hot Spots" (A-I) The following ingredients are listed or exempt:

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:

Massachusetts "Right To Know" List The following ingredients are listed or exempt:

Rhode Island "Right To Know" List The following ingredients are listed or exempt:

Minnesota "Right To Know" List The following ingredients are listed or exempt:

**New Jersey "Right To Know" List** The following ingredients are listed or exempt:

Bis(2-ethylhexyl) hydrogen phosphate

Pennsylvania "Right To Know" List The following ingredients are listed or exempt:

### 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	Skin Sens. = Skin sensitisation Eye Irrit. = Eye irritation
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 comments	Revised formulation.
Revision date	7/8/2019
Revision	1
Supersedes date	2/11/2019
SDS No.	8466
Hazard statements in full	<ul> <li>H227 Combustible liquid.</li> <li>H302 Harmful if swallowed.</li> <li>H304 May be fatal if swallowed and enters airways.</li> <li>H311 Toxic in contact with skin.</li> <li>H314 Causes severe skin burns and eye damage.</li> <li>H317 May cause an allergic skin reaction.</li> <li>H318 Causes serious eye damage.</li> <li>H320 Causes eye irritation.</li> <li>H330 Fatal if inhaled.</li> <li>H335 May cause respiratory irritation.</li> <li>H373 May cause damage to organs (Gastro-intestinal tract, liver, immune system) through prolonged or repeated exposure.</li> <li>H400 Very toxic to aquatic life.</li> <li>H410 Very toxic to aquatic life with long lasting effects.</li> <li>H412 Harmful to aquatic life with long lasting effects.</li> </ul>

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.