



SAFETY DATA SHEET AMSOIL Synthetic Chaincase & Gear Oil

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	AMEOU Synthetic Chaingers & Cast Oil	
Product name	AMSOIL Synthetic Chaincase & Gear Oil	
Product number	TCC	
Recommended use of the che		
Application	Lubricating oil.	
Uses advised against	Avoid the formation of mists.	
Details of the supplier of the s	afety data sheet	
Supplier	AMSOIL INC. Bordner, Ladner, Gervais Scotia Plaza, 40 King St W Toronto, ON, Canada M5H 3Y4 T: +1 416-367-6547	
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		
Pictogram		
Signal word	Warning	

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

Other hazards

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

3. Composition/information on ingredients		
Mixtures		
Polyisobutylene		10 - <25%
CAS number: 9003-27-4		
Classification		
Eye Irrit. 2B - H320		
Amines, C12-14-tert-alkyl		0.025 - <0.25%
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	0.025 - <0.25%
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	
	Itements 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	ires
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 o 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 wate 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 a 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	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 contamination with soap and water or recognized skin cleansing agent. Get medical attention if symptoms are severe or persist after washing.
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.
Most important symptoms an	d 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	Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	May cause sensitization or allergic reactions in sensitive individuals. Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.

Skin contact	May cause skin sensitization or allergic reactions in sensitive individuals. Prolonged contact may cause dryness of the skin.
Eye contact	Causes eye irritation.
Indication of immediate medicate	al 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	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	he substance or mixture
Specific hazards	Containers can burst violently 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	IS
Personal precautions, protection	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

Methods and material for containment and cleaning up

Environmental precautions Environmental precautions appropriate for surrounding materials.

occurs (sewers, waterways, soil or air).

Order by Phone 1-800-956-5695 - Give Operator Reference #5659349

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

Harmful to aquatic life with long lasting effects. Avoid discharge into drains or watercourses or onto the ground. Large Spillages: Inform the relevant authorities if environmental pollution

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 absorbent may pose the same hazard as the spilled material. Flush 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	cluding 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.
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/persona	I 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 generate mists, the following exposure limits are recommended:	

Under conditions which may generate mists, the following exposure limits are recommended: Long-term exposure limit (8-hour TWA): 5 mg/m³ Short-term exposure limit (15-minute): 10 mg/m³

Exposure controls

equipment should only be used if worker exposure cannot be controlled adequately by engineering control measures. Ensure control measures are regularly inspected and maintained.Eye/face protectionEyewear complying with an approved standard should be worn if a risk assessment ind eve contact is possible. Personal protective equipment for eye and face protection sho comply with OSHA 1910.133 and/or the Canadian regulation on health and safety at w 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 requir following protection should be worn: Tight-fitting safety glasses.Hand protectionChemical-resistant, impervious gloves complying with an approved standard should be a risk assessment indicates skin contact is possible. The most suitable glove should be tokes in iconsultation with the glove supplier/manufacturer, who can provide informati about the breakthrough time of the glove material. To protect hands from chemicals, gl should comply with OSHA 1910.138 and/or the Canadian regulation on health and safe york, SOR/86-304, Part XII (12.9), and be demonstrated to be impervious to the chem resist degradation. Considering the data specified by the glove manufacturer, check du use that the gloves are retaining their protective cloting complying with an approved sta deterioration is detected. Frequent changes are recommended.Other skin and body protectionAppropriate footwear and additional protective clothing complying with an approved sta dard out of the workplace. Wash contaminated clothing before reuse. Clean equipr and the work area every day. God personal hygiene procedures should be implement Wash at the end of each work shift and before eating, smoking and using the toilet. W using do not eat, drink or smoke. Preventive		
equipment should only be used if worker exposure cannot be controlled adequately by engineering control measures. Ensure control measures are regularly inspected and maintained. Eyer/ace protection Eyerear complying with an approved standard should be worn if a risk assessment increase control measures are regularly inspected and comply with OSHA 1910.133 and/or the Canadian regulation on health and safety at w SOR/86-304, Part XII (12.6), and any relevant provincial regulation inspecting to health and safety at work. Unless the assessment indicates a higher degree of protection is requir following protection should be worn: Tight-fitting safety glasses. Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be 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 informati about the breakthrough time of the glove material. To protect hands from chemicals, gl should comply with OSHA 1910.133 and/or the Canadian regulation on health and safety or considering the data specified by the glove manufacturer, check du use that the gloves are retaining their protective clothing complying with an approved state should be worn if a risk assessment indicates skin contamination is possible. Other skin and body protection Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated dothing before reuse. Clean equipm and the work area every day. Good personal hygiene procedures should be out. War cleaning personel of any hazardous properties of the product. Respiratory protection Respiratory protection complying with an approved standard should be out. War cleaning personnel of any	Information on basic physica	I and chemical properties
equipment should only be used if worker exposure cannot be controlled adequately by engineering control measures. Ensure control measures are regularly inspected and maintained.Eye/face protectionEyewear complying with an approved standard should be worn if a risk assessment in eye contact is possible. Personal protective equipment for eye and face protection should comply with OSH A 1910.133 and/or the Canadian regulation netwing to bealth and safety at work. Unless the assessment indicates a higher degree of protection is requir following protection should be worn: Tight-fiting safety glasses.Hand protectionChemical-resistant, impervious gloves complying with an approved standard should be chosen in consultation with the glove supplier/manufacturer, who can provide informati about the breakthrough time of the glove marial. To protect hands from chemicals, gl should comply with OSHA 1910.138 and/or the Canadian regulation netalth and safet y protectionOther skin and body protectionAppropriate footwear and additional protective properties and change them as soon a deterioration is detected. Frequent changes are recommended.Hygiene measuresProvide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the work place. Wash contaminated work clothing should be to be using do not eat, drink or smoke. Preventive industrial medical examinations should be out. Wam cleaning personnel of any hazardous properties of the product.Respiratory protectionRespiratory protection complying with an approved. Check that the region and the work area every day. Good personal hygiene procedures should be worn if a risk assessment indicates isnitiation of contaminated sclothing before reuse. Clean equipri and the work area every day. Good personal hygiene product. <th< th=""><th>9. Physical and Chemical Pr</th><th>operties</th></th<>	9. Physical and Chemical Pr	operties
equipment should only be used if worker exposure cannot be controlled adequately by engineering control measures. Ensure control measures are regularly inspected and maintained.Eye/face protectionEyewear complying with an approved standard should be worn if a risk assessment in eye contact is possible. Personal protective equipment for eye and face protection sho comply with OSHA 1910.133 and/or the Canadian regulation on health and safety at w SOR/86-304. Part XII (12.6), and any relevant provincial regulation relating to health at safety at work. Unless the assessment indicates a higher degree of protection is requir following protection should be worn: Tight-fitting safety glasses.Hand protectionChemical-resistant, impervious gloves complying with an approved standard should be 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 informati about the breakthrough time of the glove material. To protect hands from chemicals, gi should comply with OSHA 1910.138 and/or the Canadian regulation on health and safe york. SOR/86-304, Part XII (12.9), and be demonstrated to be impervious to the chem resist degradation. Considering the data specified by the glove manufacturer, check d use that the gloves are retaining their protective properties and change them as soon a deterioration is detected. Frequent changes are recommended.Other skin and body protectionProvide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipm and the work race every day. Good personal hygine procedures should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory pro equipment is suitable for its intended use	•	Keep container tightly sealed when not in use.
equipment should only be used if worker exposure cannot be controlled adequately by engineering control measures. Ensure control measures are regularly inspected and maintained.Eye/face protectionEyewear complying with an approved standard should be worn if a risk assessment ind eye contact is possible. Personal protective equipment for eye and face protection sho comply with OSHA 1910.133 and/or the Canadian regulation on health and safety at w SOR/86-304, Part XII (12.6), and any relevant provincial regulation relating to health an safety at work. Unless the assessment indicates a higher degree of protection is requir following protection should be worn: Tight-fitting safety glasses.Hand protectionChemical-resistant, impervious gloves complying with an approved standard should be 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 informati about the breakthrough time of the glove material. To protect hands from chemicals, gl should comply with OSHA 1910.138 and/or the Canadian regulation on health and safe work, SQR/86-304, Part XII (12.9), and be demonstrated to be impervious to the chem resist degradation. Considering the data specified by the glove manufacturer, check du use that the gloves are retaining their protective properties and change them as soon a deterioration is detected. Frequent changes are recommended.Other skin and body protectionProvide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipri and the work area every day. Good personal hygiene procedures should be implement Wash at the end of each work shift and before eating, smoking and using the toilet. Wh using do not eat, drink or smoke. Preventive	Respiratory protection	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 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 filter cartridges should comply with OSHA 1910.134 and/or the Canadian 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
equipment should only be used if worker exposure cannot be controlled adequately by engineering control measures. Ensure control measures are regularly inspected and maintained.Eye/face protectionEyewear complying with an approved standard should be worn if a risk assessment ind eye contact is possible. Personal protective equipment for eye and face protection sho comply with OSHA 1910.133 and/or the Canadian regulation on health and safety at w 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 requir following protection should be worn: Tight-fitting safety glasses.Hand protectionChemical-resistant, impervious gloves complying with an approved standard should be 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 informati about the breakthrough time of the glove material. To protect hands from chemicals, gl should comply with OSHA 1910.138 and/or the Canadian regulation on health and safet work, SOR/86-304, Part XII (12.9), and be demonstrated to be impervious to the chemic resist degradation. Considering the data specified by the glove manufacturer, check du use that the gloves are retaining their protective properties and change them as soon a deterioration is detected. Frequent changes are recommended.Other skin and bodyAppropriate footwear and additional protective clothing complying with an approved stated and additional protective clothing complying with an approved stated the section and additional protective clothing complying with an approved stated the section and protective clothing complying with an approved stated the section and protective clothing complying with an approved stated the secti	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.
equipment should only be used if worker exposure cannot be controlled adequately by engineering control measures. Ensure control measures are regularly inspected and maintained.Eye/face protectionEyewear complying with an approved standard should be worn if a risk assessment ind eye contact is possible. Personal protective equipment for eye and face protection sho comply with OSHA 1910.133 and/or the Canadian regulation on health and safety at w 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 require following protection should be worn: Tight-fitting safety glasses.Hand protectionChemical-resistant, impervious gloves complying with an approved standard should be 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 informati about the breakthrough time of the glove material. To protect hands from chemicals, gl should comply with OSHA 1910.138 and/or the Canadian regulation on health and safety work, SOR/86-304, Part XII (12.9), and be demonstrated to be impervious to the chemical- resist degradation. Considering the data specified by the glove manufacturer, check du use that the gloves are retaining their protective properties and change them as soon approxed standard should be use that the gloves are retaining their protective properties and change them as soon approxed standard.	•	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
equipment should only be used if worker exposure cannot be controlled adequately by engineering control measures. Ensure control measures are regularly inspected and maintained.Eye/face protectionEyewear complying with an approved standard should be worn if a risk assessment ind eye contact is possible. Personal protective equipment for eye and face protection sho comply with OSHA 1910.133 and/or the Canadian regulation on health and safety at w 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.	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.
equipment should only be used if worker exposure cannot be controlled adequately by engineering control measures. Ensure control measures are regularly inspected and	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.
Appropriate engineering Provide adequate ventilation. Use process enclosures, local exhaust ventilation or othe		

Appearance	Liquid.
Color	Yellow.
Odor	Aromatic hydrocarbons.
Odor threshold	Not available.

рН	Not available.	
Melting point	Not available.	
Initial boiling point and range	Not available.	
Flash point	236°C Cleveland open cup. [ASTM D 92]	
Evaporation rate	Not available.	
Upper/lower flammability or explosive limits	Not available.	
Vapor pressure	Not available.	
Vapor density	Not available.	
Relative density	0.8493	
Solubility(ies)	Not known.	
Partition coefficient	Not available.	
Auto-ignition temperature	Not available.	
Decomposition Temperature	Not available.	
Viscosity	68.6 cSt @ 40°C 10.3 cSt @ 40°C [ASTM D 445]	
Explosive properties	Not considered to be explosive.	
Oxidizing properties	Does not meet the criteria for classification as oxidizing.	
Fire point	260°C Cleveland open cup. [ASTM D 92]	
Pour point	-46°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.	
Materials to avoid	Oxidizing agents. 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	11. Toxicological information	
Information on toxicological ef	ffects	
<u>Acute toxicity - oral</u> Notes (oral LD₅₀)	Based on available data the classification criteria are not met.	
Acute toxicity - dermal		

Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.	
ATE dermal (mg/kg)	115,243.34	
Acute toxicity - inhalation		
Notes (inhalation LC₅₀)	Based on available data the classification criteria are not met.	
ATE inhalation (vapours mg/l)	229.57	
Skin corrosion/irritation		
Animal data	Based on available data the classification criteria are not met.	
Serious eye damage/irritation Serious eye damage/irritation	Causes eye irritation.	
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 -	Based on available data the classification criteria are not met.	
development		
Specific target organ toxicity - STOT - single exposure	single exposure Not classified as a specific target organ toxicant after a single exposure.	
Specific target organ toxicity - STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.	
Aspiration hazard		
Aspiration hazard	Based on available data the classification criteria are not met.	
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.	
Inhalation	Prolonged inhalation of high concentrations may damage respiratory system.	
Ingestion	May cause sensitization or allergic reactions in sensitive individuals. Gastrointestinal	
	symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.	
Skin Contact	May cause skin sensitization or allergic reactions in sensitive individuals. Prolonged contact may cause dryness of the skin.	
Eye contact	Causes eye irritation.	
Route of exposure	Ingestion Inhalation Skin and/or eye contact	
Target Organs	No specific target organs known.	

Medical considerations Skin disorders and allergies.

Toxicological information on ingredients.

		Amines, C12-14-tert-alkyl	
	Acute toxicity - oral		
	Acute toxicity oral (LD₅₀ mg/kg)	612.0	
	Species	Rat	
	Notes (oral LD ₅₀)	REACH dossier information. Harmful if swallowed.	
	ATE oral (mg/kg)	612.0	
	Acute toxicity - dermal		
	Acute toxicity dermal (LD₅₀ mg/kg)	251.0	
	Species	Rat	
	Notes (dermal LD₅₀)	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/irritation	on	
	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.	
12. Ecologie	2. Ecological Information		

Toxicity

Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

Acute aquatic toxicity	
LE(C)₅₀	0.1 < L(E)C50 ≤ 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.

Persistence and degradability

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

Ecological information on ingredients.

Amines, C12-14-tert-alkyl

Stability (hydrolysis)	pH9, pH4, pH7 - Half-life : > 1 year @ 25°C REACH dossier information.
Biodegradation	Water - Degradation 22%: 28 days REACH dossier information.

Bioaccumulative potential

Bio-Accumulative Potential No data available on bioaccumulation.

Partition coefficient Not available.

Ecological information on ingredients.

Amines, C12-14-tert-alkyl

Partition coefficient

log Pow: 2.9 REACH dossier information.

Mobility in soil

Mobility

The product is insoluble in water.

Ecological information on ingredients.

Amines, C12-14-tert-alkyl

	Mobility		Slightly soluble in water.
	Adsorption/desorption coefficient		Soil - Log Koc: 4.01 @ 20°C REACH dossier information.
	Surface tension		47.4 mN/m @ 22°C REACH dossier information.
Other adve	rse effects		
Other adve	rse effects	None kno	own.
13. Disposa	al considerations		
Waste treat	tment methods		
General info	ormation	products way. Disp comply w any local handling container	eration of waste should be minimized or avoided wherever possible. Reuse or recycle wherever possible. This material and its container must be disposed of in a safe posal of this product, process solutions, residues and by-products should at all times with the requirements of environmental protection and waste disposal legislation and authority requirements. When handling waste, the safety precautions applying to of the product should be considered. Care should be taken when handling emptied as that have not been thoroughly cleaned or rinsed out. Empty containers or liners in some product residues and hence be potentially hazardous.
Disposal m	ethods	licensed clothes a	mpty into drains. Dispose of surplus products and those that cannot be recycled via a waste disposal contractor. Waste, residues, empty containers, discarded work nd contaminated cleaning materials should be collected in designated containers, with their contents. Incineration or landfill should only be considered when recycling is oble.
14. Transpo	ort information		
General		-	uct is not covered by international regulations on the transport of dangerous goods ATA, DOT, TDG).
UN Numbe	r		
Not applica	ble.		
UN proper s	shipping name		
Not applica	ble.		
Transport h	azard class(es)		
Transport labels No transport warning sign required.			
Packing gro	oup		
Not applica	ble.		
Environmer	ntal hazards		
Environmentally Hazardous Substance			
Special pre	cautions for user		
Not applica	ble.		
DOT TIH Z	one	Not appli	cable.

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

and the IBC Code				
15. Regulatory information				
Regulatory References	OSHA 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 Extremel None of the ingredients are	y Hazardous Substances Tier II Threshold Planning Quantities listed or exempt.			
CERCLA/Superfund, Hazard None of the ingredients are I	Jous Substances/Reportable Quantities (EPA) listed or exempt.			
SARA Extremely Hazardous None of the ingredients are I	Substances EPCRA Reportable Quantities			
SARA 313 Emission Reporti None of the ingredients are I	-			
CAA Accidental Release Pre None of the ingredients are I				
SARA (311/312) Hazard Categories None of the ingredients are listed or exempt.				
OSHA Highly Hazardous Cl None of the ingredients are I				
US State Regulations				
California Proposition 65 Ca None of the ingredients are I	rcinogens and Reproductive Toxins listed or exempt.			
California Air Toxics "Hot Sp None of the ingredients are I				

California Air Toxics "Hot Spots" (A-II) None of the ingredients are listed or exempt.

California Directors List of Hazardous Substances None of the ingredients are listed or exempt.

Massachusetts "Right To Know" List None of the ingredients are listed or exempt.

Rhode Island "Right To Know" List None of the ingredients are listed or exempt.

Minnesota "Right To Know" List None of the 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

None of the 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 Aquatic Acute = Hazardous to the aquatic environment (acute) Aquatic Chronic = Hazardous to the aquatic environment (chronic)
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	This is the first issue.
Revision date	4/12/2018
SDS No.	7395

Hazard statements in full	H227 Combustible liquid.
	H302 Harmful if swallowed.
	H304 May be fatal if swallowed and enters airways.
	H311 Toxic in contact with skin.
	H314 Causes severe skin burns and eye damage.
	H317 May cause an allergic skin reaction.
	H318 Causes serious eye damage.
	H320 Causes eye irritation.
	H330 Fatal if inhaled.
	H335 May cause respiratory irritation.
	H373 May cause damage to organs (Gastro-intestinal tract, liver, immune system) through
	prolonged or repeated exposure.
	H400 Very toxic to aquatic life.
	H402 Harmful to aquatic life.
	H410 Very 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.