MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME **All ATFs, CVTs and DCTs** SAE **ALL**

Product Use Gear box and transmission lubricants **Product Number**

Uses advised against: No additional information available

Company Identification

United Grease and Lubricants Co LLC, PO Box 2685, Ajman, United Arab Emirates. Www.unitedgrease.com

Transportation Emergency Response	**Health Emergency**	**Product Information**
(971)(54) 2171575	(971)(54)2171575	(971)(54)2171575

SECTION 2 HAZARDS IDENTIFICATION

Classification — Classification under EC 1272/2008 (EU GHS CLP)

Hazardous to aquatic environment - Coronic hazard - Cat 3 — H 412

Other hazards (not relevant for classification)

Full text of H and EUH statements: See section 16

Adverse Physico chemical, human health and environmental effects: Prolonged and repeated skin contact may cause reddening, irritation and dermatitis. May cuase sensitization to skin by skin contact. Toxic to aquatic life with long lasting effects. For specific information about toxicological/ecotoxicological properties and classification of this product, see section 11 and 12

EC Index No **N/A** EC No **N/A** CAS No **N/A** REACH Registration No **N/A**

SECTION 2 Label Elements

Labelling according to Regulation (EC) No. 1272/2008 (CLP)

CLP Signal word

EUH Statements(CLP) H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (CLP) P273 - avoid release to the environment

P 501 - Dispose off contents and container according to national or local regulations

EUH statements EUH 208 - Contains reaction products of amines, dicoco alkyl and glycolic acid, 1,2 propanediol, 3-amino, N N dicocoalkyl derivatives, 2-tetradecyloxirane, reaction products with boric acid. May produce allergic reaction

Other hazards (not relevant for classification)

Health This product is combustible, but not classified as Flammable. The creation of flammable vapour mixtures takes place at temperatures which are higher than normal ambient levels. Any substance, in case of accidents involving pressurised circults and the like, may be accidentally injected under the skin, even without external damage. In such a case the victim should be bought to an hospital as soon as possible, to get specialized medical treatment. Do not wait for symptoms to develop

A potential risk may arise from the release of hydrogen sulfide, when the product is stored or handled at high temperatures. H2S may accumulate in the tanks or in confined spaces, with danger to the workers that enter these spaces. In these cases, overexposure to H2S may cause irritation to airways, nasuses, dizziness loss of consciousness and death

This substance/mixuture does not meet the PBT criteria of REACH regulation, , Annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, Annex XIII

Component

Contains no PBT/vPvB substances >0.1% assessed in accordance with REACH Annex XIII

Component	
Lubricating oils (petroleum) C20-50 hydrotreated nuetral based base oil unspecified (72636-87-1)	This substance/mixuture does not meet the PBT criteria of REACH regulation, , Annex XIII. This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Mineral base oil, severely refined	This substance/mixuture does not meet the PBT criteria of REACH regulation, , Annex XIII. This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
1-dicene, dimer, hydrogenated (68649-11-6)	This substance/mixuture does not meet the PBT criteria of REACH regulation, , Annex XIII. This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Distillates (Petroleum), hydrotreated light paraffinic (64742-55-8)	This substance/mixuture does not meet the PBT criteria of REACH regulation, , Annex XIII. This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Th mixture does not contain substances included in the list established in accordance with article 59(1) of REACH for having endocrine disrupting properties, or is identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulat EU 2018/605 at a concentration equal to greater than 0.1%

Mineral base oil, severely refined (N/A	The substanceis not included in the list established in accordance with article 59(1) of REACH for having endocrine disrupting properties or is identified as having endocrine disrupting properties in accordance the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulat EU 2018/605
1-dicene, dimer, hydrogenated (68649-11-6)	The substanceis not included in the list established in accordance with article 59(1) of REACH for having endocrine disrupting properties or is identified as having endocrine disrupting properties in accordance the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulat EU 2018/605
Distillates (Petroleum), hydrotreated light paraffinic (64742-55-8)	The substanceis not included in the list established in accordance with article 59(1) of REACH for having endocrine disrupting properties or is identified as having endocrine disrupting properties in accordance the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulat EU 2018/605

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS (SUBSTANCES)

Not applicable

3.2 Mixtures Mixture of hydrocarbons
Additives

Hazardous ingredients and/or with relevant occupational expsoure limits

Name	Product Identifier	%	Classification according to Regulation 1272/2008
Lubricating oils (petroleum) C20-50 hydrotreated nuetral oil-based base oil - unspecified (main component (see note **) substance with national workplace exposure limits	CAS 72623-87-1 EC 276-738-4 ECINo. 649-483-00-5 REACH No. 01-2119474889-13	80-90	Asp Tox 1, H 304
Lubricating oils (petroleum) C20-50 hydrotreated nuetral oil-based base oil - unspecified (see note **) substance with national workplace exposure limits	CAS 72623-87-1 EC 276-738-4 ECINo. 649-483-00-5 REACH No. 01-2119474889-13	30-35	Not classified
Mineral base oil, severely refined (substance with national workplace exposure limits)	CAS : N/A EC No, N/A ECINo. NA REACH No. ND	1-5	Asp Tox 1, H 304
1-dicene, dimer, hydrogenated (additive)	CAS 68649-11-6 EC 500-228-5 ECINo. NA REACH No. 01-2119493069-28	1-2	Acute tox 4 (oral) H 332 (ATE=1.5 mg/kg BW) Asp Tox 1, H 304

Distillates (Petroleum), hydrotreated light paraffinic (64742-55-8)	CAS 64742-55-8 EC 800-172-4 ECINo. NA REACH No. 01-21199487077-29	1-2	Asp Tox 1, H 304
Reaction products of amines, dicoco alkyl and glycolic acid (additive)	CAS EC 471 920-1 ECINo. NA REACH No. 01-0000019770-68	0.5-1.5	Skin sens, 1B, H 317
Thiophene, tetrahydro-1,1-dioxide 3(c9-11 branched alkyloxy) derivs, C1- rich (additive)	CAS 398141-87-2 EC 800-172-4 ECINo. NA REACH No. 01 2119969520-35	1-2	Skin sens, 1, H 317 Aquatic actue, 1, H 400 Aquatic chronic 2 H 411
1-2 Propanediol, 3-amino, N,N dicocoalkyl derivatives (additive)	CAS EC 482-000-4 ECINo. NA REACH No. 01-0000020142-86	0.1-0.9	Skin sens, 1, H 317 Aquatic chronic 3 H 412
2-2 (c16-c18 (even numbered, C-18 unsaturated) alkyl imino diethanol (additive)	CAS 1218787-32-6 EC No. 62- 540 6 ECINo. NA REACH No. 01-2119510877-33	0.1-0.15	Acute tox 4(Oral) H 302 ATE=500 mg/kg BW Skin Coor 1C, H 314 Eye Dam 1, H 318 Aquatic acute 1, H 400 Aquatic chronic 1, H 410
Calcium sulphonate	CAS N/D EC No. Polymer ECINo. NA REACH No. NA	0.015-0.154	Skin sens, 1, H 317
2-tetradecyloxirane, reaction products with boric acid	CAS N/D EC No. 701-392-2 ECINo. NA REACH No. 01-2119976364-28	0.015-0.154	Skin sens, 1, H 317
2-(2-heptadec-8-enyl-imidazolin-1-yl) ethanol	CAS 95 38 5 EC No. 202 214 9 ECINo. 202 414 9 REACH No. 01-2119777867-13	0.015-0.154	Acute tox 4(Oral) H 302 ATE=500 mg/kg BW Skin Corr 1C, H 314 Eye Dam 1, H 318 STOT RE 2, H 373 Aquatic acute 1, H 400 Aquatic chronic 1, H 410
1-(tert dodecylthio) propan-2-ol (Additive)	CAS 67214-09-8 EC No. 266 582 5 ECINo. NA REACH No. 01-2119953277-30	0.015-0.154	Skin sens 1, H 317 Aquatic acute 1, H 400 Acuatic chronic 1, H 410

Full text of H statements : see section 16

Specific concentration limits		
Name	Primary identifier	Specific concentration limits
Reaction products of amines, dicoco alkyl and glycolic acid (additive)	CAS EC 471 920-1 ECINo. NA REACH No. 01-0000019770-68	0.4<C<100, Skin Sesn1, H 317
1-(tert dodecylthio) propan-2-ol (Additive)	CAS 67214-09-8 EC No. 266 582 5 ECINo. NA REACH No. 01-2119953277-30	14.2<C<100, Skin Sesn1, H 317
Calcium sulphonate	CAS N/D EC No. Polymer ECINo. NA REACH No. NA	10<C<100, Skin Sesn1, H 317

Note This product maybe formulated with one or more of the following severely refined mineral base oils

(not classified as hazardous)

CAS 64742-54-7/EC 265-157-1/Reach 01-2119484627-25-xxxx:

CAS 64742-65-0/EC 265-169-7/REACH 01-2119471299-27-xxxx

CAS 647642-70-0/EC 265-174-4/REACH 01-2119487080-42-xxxx

CAS 647642-56-9/ec 2265-159-2/reach 01-2119480132-48-XXXX

All these substances have a value of <3 wt% of DMSO, according to IP 346. According to the criteria laid out by the EU (Note L annex VI of regulation (CE) 1272/2008, this product must be regarded as non carcinogenic

SECTION 4 FIRST AID MEASURES

General In case of spotaneous vomitting, transport the victin to a hospital, to verify the possibility that the product has been aspired into the lungs

inhalation In case of disturbances owing to inhalation of vapours or mists, remove the victim from exposure, keep at rest; if necessary, seek medical attention, see also point 4.3

If breathing is difficult, give oxygen if possible or assisted ventilation. Give external cardiac massage

Skin Take off contaminated clothing and shoes. Wash thoroughly with soap and water.

Contact If inflammation or irritation persists, seek medical advice. In case of contact with hot product, cool affected part with plenty of cold water, and cover with guaze or clean cloth. Call a doctor to bring to a hospital. Do not use salts or ointments, unless directed by the doctor. Body hypothermia must be avoided. Do not put ice on the burn

Eye contact Rinse eyes thoroughly for at least 15 minutes. Keep eyelids well apart. If irritation persists, seek medical advice. In case of contact with hot product, cool affected part with plenty of cold water, and cover with guaze or clean cloth. Call a doctor or bring to a hospital. Do not use salts or ointments, unless directed by doctor. Remove contact lenses, if present and easy to do so

Ingestion Do not use induce vomitting to avoid aspiration into the lungs. If the personis conscours rinse mouth with water without swallowing. Keep at rest, callfor medical assistance or bring to a hospital. If the casualty is inconsciou,s place in the recovery position. In case of spontaneous vomitting, keep head low, to avoid the risk of aspiration into the lungs
Do not give anything by mouth to an unconscious person

Most important symptoms and effects, both acute and delayed

Symptons/injuries (general indications) Prolonged and repeated skin contact may cause redenning irritation and dermatitis

Systems/Injuries after inhalation Inhalation of fumes or oil mists produced at higher temperatures may cause irritation of respiratory tract, symptons of over exposure to vapours include drowsiness, weakness, headache dizzines, nausea, vomitting, dimming of vision

Systems/Injuries after skin contact Prolonged or repeated skin contact may cause a redeening, irritation and dermatitis, due to a defatting effect. Contact with hot product may

cause thermal burns

Systems/Injuries after eye contact Contact with eyes may cause temporary reddening and irritation
Contact with hot product or vapours may cause burns

Symptoms/injuries after ingestion
Accidental ingestion of small quantities of the product may cause nausea, discomfort and gastric disturbances.

Symptoms/injuries upon intravenous administration No information available

Chronic symptoms None known

Indication of any immediate medical attention and special treatment needed

Seek medical attention in all cases
especially if th casualty has an altered state of consciousness or if symptoms do not resolve and in case of serious burns

SECTION 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA Dry powder, CO2, water spray, other extinsguhing gases (as per regulation)
These means should be used by trained personnel only.

UNSUITABLE Do not use a heavy water jets. They could cause splattering, and spread the fire

Special hazards arising from the substance or mixture

Fire Hazard The product is combustible, but not classified as flammable. The creation of flammable vapour mixtures takes place at temperatures which are higher than normal ambient levels

Explosion Hazard In case of losses from pressurised circuits, the sprays may form mists. Take into account that in this case the lower explostion limit for mists is about 45g/m3 of air

Hazardous decomposition products in case of fire
Incompelte combustion releases dangerous carbon monoxide, carbon di oxide and other toxic gases NOx, H2S, SOx, oxygenated compounds (aldehydes etc.; POx XNoX, CaOx

Advice for firefighters

Firefighting instructions Shut off source of product, if possible. If possible, move containers and drums away from danger area. Spilled product which is not burning should be covered with sand or foam. Use water sprays to cool containers and surfaces exposed to the flames. If the fire cannot be controlled, evacuate area

Special protective equipment for firefighters
Wear personal protection equipment (see chapter 8).
Self contained breathing apparatus with full face piece operated in positive pressure mode. EV 443, EN 469, EN 659

Other information In case of fire, do not discharge residual product, waste materials and run off water. Collect separately and use a proper treatment

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Stop or contain leak at the source, if safe to do so. Eliminate all ignition sources if safe to do so (e.g. electricity, sparks, fires, flares). Avoid contact with released material

For Non emergency Personnel

Protective Equipment See section 8

Emergency Procedures Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency.

For Emergency Responders

Protective equipment Standard EN 469.
Small spillages: normal antistatic working clothes are usually adequate.
Large spillate: full body suit of chemically resistant and antistatic mtl necessary heat resistant and insulated. Work gloves providing adequate chemical esistance, specifically to aromatic hydrocarbons. Gloves made of PVA are not water-resistant, and are not suitable for emergency use.
If contact with hot product is possible or anticipated, gloves should be

heat-resistant and thermally insulated. Antistatic non skid safety shoes or boots, chemical resistant, if necessary heat resistant and insulated. Work helmet, antistatic non skid safety shoes or boots.

Respiratory protection: A half or full-face respirator with filter for organic vapours (and when applicable for H2S). A Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.

Emergency Procedures Notify local authorities according to relevant regulations.

Environmental precautions

Do not let the product flow into sewers or water courses, or in any way contaminate the environment. In case of contamination of environment compartments (soil, subsoil, surface or underground waters), remove contaminated soil when possible, and in any case treat all involved compartments in accordance with local regulations.The site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases.

Methods and material for containment and cleaning up

For containment Contain spilled liquid with sand, earth or other suitable absorbents Recover free liquid and waste materials in suitable waterproof and oil resistant containers. Clean contaminated area. Dispose of according to local regulations. Water: Confine the spillage. Remove from surface by skimming or suitable floating absorbents. Collect recovered product and other waste materials in suitable waterproof, oil resistant containers. Recover or dispose of according to local regulations.

Methods for cleaning up Transfer recovered product and other materials to suitable tanks or containers and store/dispose according to relevant regulations

Other Information Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave/current direction and speed) may significantly influence the choice of appropriate actions. Local regulations may also prescribe or limit actions to be taken.

Reference to other sections

for further information, refer to section 8 and 13

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling This material is combustible, but will not ignite readily. Provide adequate ventilation. Use adequate PPE as needed.
Ensure that all releveant regulations regardinghandling and storage of flammable products are followed. DO not use compressed air for filling, discharging or handling operations. Keep away from heat/sparks/open flames/hot surfaces. Use and store only outdoors or in a well ventilated area. During transfoer and mixing operations, ensure that all equipment is correctly grounded. Avoid the build up of electric charges
Provide good ventilation n process area to prevent formation of vapour
Keep away from sources of ignition No smoling. Sotre in dry, well ventilated area. Do not breathe fune/mist/vapours
Because of the extremely slippery nature of this material, more care than usual must be exercised in material handling practices tokeep off all walking surfaces. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid releases to the environment. Emptied containers can contain combustible product residues. Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been drained and cleaned. Before entering storage tanks and commencing any operation in a confined area (tunnels), carry out an adequate clean up, and check the atmosphere for oxygen content and flammability

Handling temperatures 0 to 65 deg C

Hygeine Measures Avoid contact with skin. DO not breahe fume/mist/vapours. DO not ingest

	Do not smoke. DO not eat and do not drink during use. Donot clean hands with dirty or oil soaked rags. Donot reuse clothes. If they are still contaminated, keep away from food and beverages

Conditions for safe storage, including any incompatibilities

Stoage conditions	Store in dry, well ventilated area. Keep away from open flames, hot surfaces and sources of ignition. Do not smoke. If product is supplied in containers, keep only in the original container or in a suitable container for this kind of product. Keep containers tightly closed and properly labelled
Incompatible Products	Strong acids, strong oxidants. Strong bases/alkalies
Storage temperatures	0 to 55 deg C
Storage area	Storage area layout, tank design, equipment and operating procedures must comply with the local legislation. Storage installations should be designed with adequate bunds so as to prevent ground and water pollution in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations.
Package and Containers	If the product is supplied in containers, keep containers tightly closed and properly labelled. Keep only in the original container or in suitable container for this kind of product. Empty containers may contain combustible residues. Do not weld, solder, drill, cut or incinerate empty containers, unless they have been properly cleaned
Packaging Materials	For containers, or container linings use materials specifically approved for use with this product. Recommended materials for containers or container linings use mild steel, stainless stee,. Some synthetic materials may be unsuitable for containers or containing linings depending upon the mateiral specifications and intended use.
Specific End Uses	No information available

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

National occupational exposure and biological limit values (US NIOSH, ACGIH AND OSHA)

No additional information available

Lubricating oils (petroleum) C20-50 hydrotreated nuetral oil-based, Baseoil - unspecified

ACGIH OEL TWA	5 mg/m3 (mineral oil, mist, severely refined, DMSO < 3% m/m)
ACGIH OEL STEL	10 mg/m3 (mineral oil, mist, severely refined, DMSO < 3% m/m)

Mineral base oil, severely refined (N/A)

ACGIH OEL TWA	5 mg/m3 (mineral oil, mist, severely refined, DMSO < 3% m/m)
ACGIH OEL STEL	10 mg/m3 (mineral oil, mist, severely refined, DMSO < 3% m/m)

Distillates (Petroleum), hydrotreated light paraffinic

ACGIH OEL TWA	5 mg/m3 (mineral oil, mist, severely refined, DMSO < 3% m/m)
ACGIH OEL STEL	10 mg/m3 (mineral oil, mist, severely refined, DMSO < 3% m/m)

Recommended monitoring procedures	Monitoring methods should be chosen according to the indications set by national authorities or labour contracts. Refer to relevant legislation and in any case to the good practice of industrial hygeine
Air contaminants formed	No additional information available
DNEL/DMEL (General Population)	
All ATFs, CVTs and DCTs	Not applicable

Lubricating oils (petroleum) C20-50 hydrotreated nuetral oil-based, Baseoil - unspecified

DNEL/DMEL (workers)	
Long term systemic effect, oral	
Long term systemic effct, inhalation	2.73 mg/m3
Long term systemic effect, dermal	0.97 mg/kg of body weight/ day
Long term local effects Inhalation	5.58 mg/m3

Mineral base oil, severely refined (N/A)

DNEL/DMEL (workers)	
Long term systemic effct, inhalation	5.4 mg/kg of body weight/ day
DNEL/DMEL (General Population)	

Long term local effects Inhalation	1.2 mg/kg of body weight/ day
1-dicene, dimer, hydrogenated	
DNEL/DMEL (workers)	
Acute, systemc effects,inhalation	60 mg/m3
Acute local effects, inhalation	60 mg/m3 (DNEL, 15 min)
DNEL/DMEL (General Population)	
Acute, systemc effects,inhalation	50 mg/m3
Acute local effects, inhalation	50 mg/m3 (DNEL, 15 min)
Distillates (Petroleum), hydrotreated light paraffinic	
DNEL/DMEL (workers)	
Long term systemic effect, dermal	0.97 mg/kg of body weight/ day
Long term systemic effct, inhalation	2.73 mg/m3
Long term local effects Inhalation	5.58 mg/m3
DNEL/DMEL (General Population)	
Long term systemic effect, oral	0.74 mg/kg of body weight/ day
Long term systemic effect, dermal	1.19 mg/m3
PNEC Oral (secondary poisoning)	9.33 mg/kg food
Thiophene, tetrahydro-1,1-dioxide 3(c9-11 branched	
DNEL/DMEL (workers)	
Long term systemic effect, dermal	350 mg/kg of body weight/ day
Long term systemic effct, inhalation	24.7 mg/kg food
DNEL/DMEL (General Population)	
Long term systemic effect, oral	2.5 mg/kg of body weight/ day
Long term systemic effct, inhalation	4.53 mg/m3
Long term systemic effect, dermal	125 mg/kg of body weight/ day
PNEC Water	
PNEC Aqua fresh water	2.4 µg/L
PNEC Aqua - marine water	0.33 µg/L
PNEC Aqua (intermittent, fresh water)	24 µg/L
PNEC Aqua (intermittent, marine water)	3.3 µg/L
PNEC Sediment	
PNEC sediment (fresh water)	0.433 mg/kg dwt
PNEC sediment (marine water)	0.056 mg/kg dwt
PNEC Soil	85.3 µg/kg
PNEC STP	100 mg/l
PNEC Oral (secondary poisoning)	111.11 mg/kg food
Reaction products of amines, dicoco alkyl and	
DNEL/DMEL (workers)	
Acute local effects dermal	417.36 µg/cm2
PNEC Water	
PNEC Aqua fresh water	400 µg/L
PNEC Aqua - marine water	40 µg/L
PNEC Aqua (intermittent, fresh water)	13 µg/L
PNEC Sediment	
PNEC sediment (fresh water)	17100 mg/kg dwt
PNEC sediment (marine water)	1701 mg/kg dwt
PNEC Soil	3.416 g/kg food
PNEC STP	100 mg/l
1-(tert dodecylthio) propan-2-ol (Additive)	
DNEL/DMEL (workers)	
Acute local effects dermal	0.2154 µg/cm2
Long term systemic effect, dermal	3.34 mg/kg dwt/day
DNEL/DMEL (General Population)	
Acute local effects dermal	0.1077 µmg/cm2
Long term systemic effect, oral	0.84 mg/kg of body weight/ day
Long term systemic effct, inhalation	2.9 mg/m3

Long term systemic effect, dermal	1.67 mg/kg of body weight/ day
PNEC Water	
PNEC Aqua fresh water	6.4 µg/L
PNEC Aqua - marine water	0.64 µg/L
PNEC Aqua (intermittent, fresh water)	5.8 µg/L
PNEC Sediment	
PNEC sediment (fresh water)	8.28 mg/kg dwt
PNEC sediment (marine water)	0.828 mg/kg dwt
PNEC Soil	244 µg/kg
PNEC STP	100 mg/l
PNEC Oral (secondary poisoning)	33.33 mg/kg food
1-2 Propanediol, 3-amino, N,N dicocoalkyl derivatives	
DNEL/DMEL/PNEC (additional information)	Not derived/Not determined
2-2 (c16-c18 (even numbered, C-18 unsaturated) alkyl imino diethanol (1218787-32-6)	
DNEL/DMEL (workers)	
Long term systemic effect, dermal	0.3 mg/kg of body weight/ day
Long term systemic effct, inhalation	2.112 mg/m3
DNEL/DMEL (General Population)	
Long term systemic effect, oral	0.214 mg/kg of body weight/ day
Long term systemic effct, inhalation	745 µg/m3
Long term systemic effect, dermal	0.214 mg/kg of body weight/ day
PNEC Water	
PNEC Aqua fresh water	214 ng/L
PNEC Aqua - marine water	21.4 ng/L
PNEC Aqua (intermittent, fresh water)	0.87 µg/L
PNEC Sediment	
PNEC sediment (fresh water)	1.692 mg/kg dwt
PNEC sediment (marine water)	169.2 mg/kg dwt
PNEC Soil	5 mg/kg
PNEC Oral (secondary poisoning)	2 mg/kg food
PNEC STP	1.5 mg/l
Additional information	Note: The derived no effect level (CNEL) is an estimated safe level of exposure that is derived from toxicity data in accord with specific guidance within the European REACH regulations. The DNEL may differ from an Occupational Exposure Limit (OEL) for the same chemical. OELs may be recommended by an individual company, a governmental regulatory body or an expert organization, such as the soceity committee for occupation exosure limit (SCOEL), or the Americal conference of governmental industrial hygeinits (ACGIH). Oems are considered to be safe expsoure levels for a typical worker in an occupational setting for a 8 hour work shift, 40 hour work week, as a time weighted average (TWA) or a 15 minute short term expsoure limit (STEL). While also considered to be protective of health, OELs are derived by a process different from that of REACH
Control banding	No additional information available

EXPOSURE CONTROLS

Appropriate Engineering Controls

Before entering storage tanks and commencing any operation in a confined area, carry out an adequate clean up and check the atmosphere for oxygen content, flamability and the presence of sulfur compounds

See also section 16, Other information

PERSONAL PROTECTIVE EQUIPMENT (for industrial or professional use)

Face shield, Gloves, Protective clothing, safety glasses, safety shoes or boots, dust/aerosol mask

Personal Protective Equipment (Symbol(s):

Eye/Face Protection	Safety glass DIN EN 166
Skin/Body Protection	Long sleeved overalls. If necessary, refer to EN 340 and related standards for definition of characteristcs and performance according to the risk rating of the area. Wash contaminated clothing before use for protective gloves include:
Hand Protection	Protective gloves, adequate materials, nitrile (NBR) or PVC with a protection index >5 (permeation time > 240 min). Use gloves respecting all the conditions and within the limits set by the manufacturer. Replace gloves immeidately in case of cuts, holes or other signs of damages or degradation If necessary refer to the EM 374 staneards. Thickness of glove mtl >0,4 mm Personal hygiene is a key element for an effective hand care. Gloves must be worn only with clean hands. After wearing of gloves, hands must be carefully washed and dried
Eye protection	When there is a risk of contact with the eyes, use safety goggles or other means of protection(face shield). If necessary refer tonational standards or to the EN 166 standard
Respiratory	No respiratory protection is normally required with sufficient ventilation
Protection	Indepependtly from other substances action (technical modifications, operating procedures, and other means to limit the expsoure of workers) personal protection equipment can beused according to necesssity. Open or well ventialted spaces; if product is handled without adequate containkent; use full or half face masks with adequate filter for mists and organic vapours. (En 136/140/145). Closed or confined areas (ex tank interiors), the use of protection measures for airways (masks or self contained breathing apparatus) must be assessed according to the specific activity, as well as level and duration of predicted exposure (EN 136/140/145) Combination filter device (DIN EN 141). Combined gas/dust mask with filter type A Filter P (White)
Thermal Hazards	None in normal use conditions
Thermal hazard protection	If contact with hot product is possible, or anticipated, gloves should be heat resistant and thermally insulated

Environmental exposure controls

Stoage areas/installations should be designed with adequate bunds so as to prevent ground and water pollution in case of leaks or spills. Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed Do not discharge the product into the environment.

Consumer expsoure controls

Not applicable

Hygeine measures

Avoid contact with skin. DO not breathe fume/mist/vapours. DO not ingest Do not smoke. DO not eat and do not drink during use. Donot clean hands with dirty or oil soaked rags. Donot reuse clothes. If they are still contaminated, keep away from food and beverages

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Attention: The data below are typical values and do not constitute a specification

Color	Red (dyed)
Physical State	Liquid
Odor	Characteristic
Odor Threshold	No data available
pH	Not available
Vapor Pressure	No data available
Boiling Point	No data available
Solubility	Immiscible in water
Pour Point deg C D 97	-48 deg C D 97
Boiling Point	No data available
FlashPoint	>180 deg c (D 93)

Density	0.85 kg/L @ 20°C (Typical)
Viscosity	>20.5 cst at 40 deg C; 5.7 at 100 deg C
Log Kow	Not applicable for mixutures
Evaporation Rate	No data available
Decomposition Temperature	No data available
Octanol/Water Partition Coefficient	No data available
VOC Content	0% (EU, CH)
Flammability	No data available
Explosive properties	None
Oxidising properties	None
Explosive limits	None
Lower explosion limit	No data available
Upper explostion limit	None
Autoignition temperature	Not determined
Log Kow	Not applicable for mixutures
Relative density	Not determined
Relative vapour density at 20 deg C	Not determined
Particle characteristics	Not determined
Other information	
Information with regard to physical hazard classes	
Critical temperature	Not applicable to mixtures

Other safety characteristics

Relative evaporation rate (butylacetate=1) Negligible. No other data available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity This mixuture does not offer any further hazard, except what is reported in the following paragraphs

Chemical Stability Stable prdouct according to its intrinsic properties

Incompatibility with Other Materials: Strong oxidants and acids

Possibility of Hazardous reactions None (in normal conditions of storage and handling). Contact witb strong oxidisers (peroxides, chromates etc) may cause a fire hazarad. A mixture with nitrates and other strong oxidisers (chlorates, perchlorates, liquid oxygen) may create an explosive mass Sensisity to heat, friction or shock cannot be assessed in advance

Conditions to avoid Keep away from strong oxidants, open flames, hot surfaces and sources of ignition. Avoid buildup of static charge

Hazardous decomposition products In exceptiona cases (prlonged storage in tanks contaminated with water and presence of anaerobic bacterica sulfate reducing microbial colonies0, the product may undergo a degradation and generate small amounts of sulfur compounds, inclduing H2S

SECTION 11 - TOXICOLOGIAL INFORMATION (mixture)

Acute toxicity (oral)	Not classified (based on available data, the classification criteria are not met)
Acute toxicity (dermal)	Not classified (based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	Not classified (based on available data, the classification criteria are not met)
Additonal information	According to composition

Lubricating oils (petroleum) C20-50 hydrotreated nuetral oil-based, Baseoil - unspecified	
LD 50 Oral rat	>5000 mg/kg of body weight (OECD 401)
LD 50 dermal rabbit	>5000 mg/kg of body weight (OECD 402)
LC 50 Inhalation rat	>5 mg/l/ (4 hours) (OECD 403)
Mineral base oil	
LD 50 Oral rat	>5000 mg/kg of body weight (OECD 401)
LD 50 dermal rabbit	>5000 mg/kg of body weight (OECD 402)
1 Dicene, Dimer, Hydrogenated (68649-11-6)	
LD 50 Oral rat	>5000 mg/kg of body weight (OECD 401)
LD 50 dermal rabbit	>2000 mg/kg of body weight (OECD 402)
LC 50 Inhalation rat	1.17 mg/l/4H (inhalable aerosol)
Thiophene, tetrahydro, 1-1 dioxide 3 (c9-C11 branched alkyloxy) deriv, C 10 rich (398141-87-2)	
LD 50 Oral rat	10 ml/kg
LD 50 dermal rabbit	4000-8000 mg/kg bodyweight

Reaction products of amines, dicoco alkyl and glycolic acid	
LD 50 Oral rat	2500 mg/kg of body weight (OECD 401)
LD 50 dermal rabbit	2000 mg/kg of body weight (OECD 401)
1 (tert dodecylthio)propan-2-ol (67124-09-8)	
LD 50 Oral rat	5000 mg/kg of body weight (OECD 401)
LD 50 dermal rabbit	2000 mg/kg of body weight (OECD 401)
1,2 propanediol, 3 amino, NN dococoalkyl derivatives	
LD 50 Oral rat	2500 mg/kg of body weight (OECD 401)
2-2 (c16-c18 (even numbered, C-18 unsaturated) alkyl imino diethanol (1218787-32-6)	
LD 50 Oral rat	1200-2000 mg/kg of body weight (OECD 401)
2 (2 heptadec 8-enyl-2-imidazolin-1-yl) ethanol (95-38-3)	
LD 50 Oral rat	1000-1265 mg/kg of body weight (OECD 401)

Skin Corrosion/Irritation	Not classified (based on available data, classification criteria are not met) According to composition Prolonged or repeated skincontact may cause reddening, irritation and dermatitis due to defatting effect pH NA
Serious eye damage/irritation	Not classified (based on available data, the classification criteria are not met) pH NA
Respiratory or skin sensitization	Not classified (based on available data, the classification criteria are not met)
Additional information	According to composition Thisproduct contains components with a specific concentration limit (SCL)
Germ cell mutagenicity	Not classified (based on available data, the classification criteria are not met)
Additional information	According to composition Contains 1,2 benzisothiazol -2 (2H)- one Causes sensitisation
Carcinogenicity	Not classified (based on available data, the classification criteria are not met)
Additional information	According to composition All the mineral base oils contained in the product have a value of ,3% of DMSO extract, according to IP 346/92 (nota L Dir 94/69/CE)
Reproductive toxicity	Not classified (based on available data, the classification criteria are not met) According to composition This product does not contain any significant amounts of substacnes classified as toxic for reproduction by the EU (In any case ,0.1 wt%)
Specific target organ (Single exposure)	Not classified (based on available data, the classification criteria are not met) According to composition
Specific target organ Repeated exposure	Not classified (based on available data, the classification criteria are not met) According to composition

2-2 (c16-c18 (even numbered, C-18 unsaturated) alkyl imino diethanol (1218787-32-6)	
NOAEL (acute,oral, animal/male)	13 mg/kg bodyweight
Pyridine-2-thiol 1-oxide, sodium salt (3811-73-2)	
LOAEL (male rat, F1)	2.8 mg/kg bodyweight (reproduction/fertility effects)
LOAEL (female rat, F1)	1.4 mg/kg bodyweight (reproduction/fertility effects)
NOAEL (male, rat,F1)	1.4 mg/kg bodyweight male: 0.7 for female
Specific target organ Repeated exposure	Not classified (based on available data, the classification criteria are not met) According to composition
Pyridine-2-thiol 1-oxide, sodium salt (3811-73-2)	
LOAEL (oral, rat,)	1.5 mg/kg bodyweight
2 (2 heptadec 8-enyl-2-imidazolin-1-yl) ethanol (95-38-3)	
LOAEL (oral, rat, 90 days)	20 mg/kg bodyweight
STOT repeated exposure	Not classified
Additional information	According to composition
Lubricating oils (petroleum) C20-50 hydrotreated nuetral oil-based, Baseoil - unspecified	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight
Mineral base oil	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight
Reaction products of amines, dicoco alkyl and glycolic acid	
LOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight
2 (2 heptadec 8-enyl-2-imidazolin-1-yl) ethanol (95-38-3)	
NOAEL (oral, rat, 90 days)	20 mg/kg bodyweight
STOT repeated exposure	May cause damage to organs through prolonged
Aspiration hazard	Not classified (based on available data, the classification criteria are not met)
Potential adverse human health effects and symptoms	Repeated and prolonged skin contact may cause reddening, irritation and dermatitis due to defatting effect. Contact with eyes may cause temporary irritation
Additional information	According to composition
Viscosity	>20.5 cst at 40 deg C: 5.7 cst at 100 deg C for the final product

SECTION 12 - ECOLOGICAL INFORMATION

ECOTOXICITY/Ecolory-General Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment.

An uncontrolled release to the environment may nevertheless produce a contamination of different environmental compartments (soil, underground, surface water bodies, aquifers). Handle according to general working hygiene practices to avoid pollution and release into the environment. Notify authorities if produce enters sewers or public waters. Not soluble in water. If floats on water amd forms a film on the surface. The damage to aquatic organisms is of mechanical kind (immobilization and entrapment

Ecology - air This product has low vapour pressure. A significant exposure may happen only if the product is used at high temperature or in case of sprays/mists

Ecology water Not soluble in water, see above section on general ecotoxicity

Hazardous to the aquatic environment, short term acute: Not applicable

Hazardous to the aquatic environment, long term chronic: Harmful to aquatic lif with long lasting effects

Lubricating oils (petroleum) C20-50 hydrotreated nuetral oil-based, Baseoil - unspecified	
LC 50 fish 1	> 100 mg/L (LL 50)
LC 50 fish 2	
EC50 Daphnia 1	>10000 mg/L WAF, 48h (OECD 202)
NOEC Chronic algae	
Mineral base oil	
LC 50 fish 1	> 100 mg/L (LL 50)
LC 50 fish 2	
EC50 Daphnia 1	>10000 mg/L WAF, 48h (OECD 202)
1 Dicene, Dimer, Hydrogenated (68649-11-6)	
LC 50 fish 1	>1000 mg/l test (96H)organisms Oncorhynchus mykiss
LC 50 fish 2	>2.15 mg/l test organisms Oncorhynchus mykiss
EC50 Daphnia 1	>1000 mg/l test organisms Daphnia magna
ErC50 (algae)	>1000 mg/l test (72H) organ:scenedesmus caprocornutum)
NOEC Chronic	=125 mg/l (21d, daphnia mangna))
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
EC50 Daphnia 1	>10000 mg/L WAF, 48h (OECD 202)
Thiophene, tetrahydro, 1-1 dioxide 3 (c9-C11 branched alkyloxy) deriv, C 10 rich (398141-87-2)	
LC 50 fish 1	2.4 mg/L (LL 50)
LC 50 fish 2	
EC50 Daphnia 1	4.6 mg/L
Reaction products of amines, dicoco alkyl and glycolic acid	
LC 50 fish 1	610 mg/L (LL 50)
EC50, 72H algae	130-160 mg/l (EL 50)

EC50 Daphnia 1	210-18000 µg/L
NOEC Chronic crustacea	56 mg/l (21d, NOELR)
1,2 propanediol, 3 amino, NN dococoalkyl derivatives	
LC 50 fish 1	>100 mg/l test (96H)organisms Oncorhynchus mykiss
EC50, 72H algae 1	10 mg/l (EL 50) Desmodesmus Subspicatus
EC50, 72H algae 2	16 mg/l (EL 50) Desmodesmus Subspicatus
EC 50 other acquatic organisms 1	230 mg/L organism- other aquatic crustacea
1 (tert dodecylthio)propan-2-ol (67124-09-8)	
LC 50 fish 1	750 µg/L (LL 50)
EC50, 96H algae	>100 mg/l
EC50 Daphnia 1	560 µg/L (LL 50)
2 (2 heptadec 8-enyl-2-imidazolin-1-yl) ethanol (95-38-3)	
LC 50 fish 1	0.3 mg/L (Brachydanio reno)
EC50, 72H algae 1	0.03 mg/l (EL 50)
EC50, 72H algae 2	0.0169 mg/L desmodesmus subspicatus
EC50 Daphnia 1	0.163 µg/L Daphnia magna
NOEC Chronic algae	0.011 mg/L
1 (tert dodecylthio)propan-2-ol (67124-09-8)	
LC 50 fish 1	>100 mg/l test (96H)
EC50 Daphnia 2	20 mg/l (daphnia magna, 21 day)
EC50 Daphnia 1	>100 mg/l test organisms Daphnia magna 2d
ErC50 (algae)	>100 mg/l test (72H) organ:Selenastrum capricomutum

PERSISTENCE AND DEGRADABILITY

All ATFs, CVTs and DCTs

Persistence and degradability	The most significant constituents of the product should be considered as inherently biodegradable', but not 'readily biodegradable'. And they may be moderately persistent, particularly in anaerobic conditions

Lubricating oils (petroleum) C20-50 hydrotreated nuetral oil-based, Baseoil - unspecified

Persistence and degradability	The most significant constituents of the product should be considered as inherently biodegradable', but not 'readily biodegradable'. And they may be moderately persistent, particularly in anaerobic conditions

Mineral base oil

Persistence and degradability	The most significant constituents of the product should be considered as inherently biodegradable', but not 'readily biodegradable'. And they may be moderately persistent, particularly in anaerobic conditions

1 Dicene, Dimer, Hydrogenated (68649-11-6)

Persistence and degradability	Inherently biodegradable

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)

Persistence and degradability	The most significant constituents of the product should be considered as inherently biodegradable', but not 'readily biodegradable'. And they may be moderately persistent, particularly in anaerobic conditions

Thiophene, tetrahydro, 1-1 dioxide 3 (c9-C11 branched alkyloxy) deriv, C 10 rich (398141-87-2)

Biodegradation	9.6% (28d, OECD TG 301 C)

1 (tert dodecylthio)propan-2-ol (67124-09-8)

Biodegradation	5.9% (28d, OECD TG 301 C)

2-2 (c16-c18 (even numbered, C-18 unsaturated) alkyl imino diethanol (1218787-32-6)

Biodegradation	63% (28d, OECD TG 301 C)

2 (2 heptadec 8-enyl-2-imidazolin-1-yl) ethanol (95-38-3)

Biodegradation	1% (28d, OECD TG 301 C)

2 tetradecyloxirane, reaction products with boric acid

Persistence and degradability	Not readily biodegradable
Biodegradation	17.3 (28d, OECD TG 301 C)

BIO ACCUMULATIVE POTENTIAL

All ATFs, CVTs and DCTs

Log POW	Not applicable for mixtures
Log Kow	Not applicable for mixtures
Bioaccumulative potential	Not established

Lubricating oils (petroleum) C20-50 hydrotreated nuetral oil-based, Baseoil - unspecified	
Bioaccumulative potential	>6
Log Kow	>6
Thiophene, tetrahydro, 1-1 dioxide 3 (c9-C11 branched alkyloxy) deriv, C 10 rich (398141-87-2)	
Bioconcentration factor (BCF REACH)	27.54
Log POW	4.1
1 (tert dodecylthio)propan-2-ol (67124-09-8)	
Log Kow	5.7
2-2 (c16-c18 (even numbered, C-18 unsaturated) alkyl imino diethanol (1218787-32-6)	
Bioconcentration factor (BCF REACH)	110.2
Log Kow	3.6
2 (2 heptadec 8-enyl-2-imidazolin-1-yl) ethanol (95-38-3)	
Log Kow	>7
2 tetradecyloxirane, reaction products with boric acid	
Log Kow	9.4

Mobility in Soil

All ATFs, CVTs and DCTs

Ecology Soil	No data available
Mobility in soil	Not determined

Results of PBT and vPvB assessment

All ATFs, CVTs and DCTs

This substance/mixuture does not meet the PBT criteria of REACH regulation, , Annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, Annex XIII

Results of PBT-VpVB assessment **(including components)**	The components inthis formulation do not meet the criteria for classification as PBT or vPvB. The prodcut should be considered persistent' in the environment according to the REACH Annex XIII criteria (Point 1.1)
Other adverse effects	None
Additional information	No other effects known

Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties	The mixture does not contain substances included in the list established in accordance with article 50(1) of REACH for having endocrine disrupting properties, or is not idenfified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EC 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1%

SECTION 13 - DISPOSAL CONSIDERATIONS

Regional legislation	**Disposal must be done according to official regulations**
Waste treatment methods	Do not dispose of the product, either new or used, by dumping on the ground, or discharging into seweres, tunnels, lakes or water courses. Deliver to a qualified official collector
Sewage disposal considerations	Do not apply industrial sludge to natural soils;. Sludge should be incinerated, contained or reclaimed Dispose off in a safe manner in accordance with local and national regulations
Product/Packing disposal consi-iderations indication and	European Waste Catalogue code (s) (Decision 2001/118/CE): 113 02 05* (mineral based non chlroinated engine, gear and lubricating oils) 12 01 09* (machining emulsions and solutions free of halogens). This EWC code is only a general and takes into account the original composition of the product and its intended use. The user has the responsibility of choosing the right EWC code, considering the acutal use
Additonal information	Do not cut, weld, bore, ł of the product, alterations and contaminations
Ecology- waste materials	and declared safe The product as it is does not contain halogenated substances
EURAL Code (EWC)	13 02 05* (mineral based non cholrinated engine, gear and lubricating oils)

SECTION 14 - TRANSPORT INFORMATION

In accordance with ADR/IMDG/IATA/AND/RID

ADR	IMDG	IATA	ADN	RID
UN Number or ID Number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
UN Proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
Packing Group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

No supplementaty information available

Overland transport **Not regulated**
Transport by sea **Not regulated**
Air transport **Not regulated**
Inland waterway transport **Not regulated**
Rail transport **Not regulated**

Transport in bulk according to annex II of MARPOL 73/78 and the IBC Code

IBC Code : Not applicable

SECTION 15 - REGULATORY INFORMATION (Mixture)

EU Regulations

The following restrictions are applicable according to Annex XVII of the REACH regulations no 1097/2006

3(b) Lubricating oils (petroleum) c20-50 hydrotreated nuetral Mineral base oil 1 Dicene, Dimer, Hydrogenated (68649-11-6) Distillates (petroleum), hydrotreated light paraffinic (64742-55-8) Reaction products of amines, dicoco alkyl and glycolic acid 1 (tert dodecylthio)propan-2-ol (67124-09-8) 1,2 propanediol, 3 amino, NN dococoalkyl derivatives 2-2 (c16-c18 (even numbered, C-18 unsaturated) alkyl imino diethanol (1218787-32-6) 2 (2 heptadec 8-enyl-2-imidazolin-1-yl) ethanol (95-38-3)	Substances or mixtures fulfilling for any of the following hazard classes or categories set out in Annex 1 to Regulation EC No. 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects 3.9 and 3.10
3(C) All ATFs, CVTs and DCTs Thiophene, tetrahydro, 1-1 dioxide 3 (c9-C11 branched alkyloxy) deriv, C 10 ric 1 (tert dodecylthio)propan-2-ol (67124-09-8) 1,2 propanediol, 3 amino, NN dococoalkyl derivatives 2-2 (c16-c18 (even numbered, C-18 unsaturated) alkyl imino diethanol (121878 2 (2 heptadec 8-enyl-2-imidazolin-1-yl) ethanol (95-38-3)	Substances or mixtures fulfilling for any of the following hazard classes or categories set out in Annex 1 to Regulation EC No. 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects 3.9 and 3.10

No REACH Annex XVII/XIV restrictions
No ingredients are included in the REACH candidate list (>0.1% m/m/)
Other information, restriction and prohibition regulations
Contains no substance subject to regulation EU No. 649/2012 of the European parlianment and of the council
Contains no substance subject to regulation EU No. 2019/1021 of the European parlianment and of the council of 20 June 2012 concerning persistent organic pollutants
Contains no substance listed in PIC List EU No. 649/2012 of the European parlianment and of the council
Contains no substance listed in POP List EU No. 649/2012 of the European parlianment and of the council
Contains no substance listed in ozone depletion list EU No. 1005/2009
Contains no substance listed in explosive percursons list EU No. 2019/1448

EC No. 1907/2006	EC 1272/2008	67/548/EEC	1999/45/EC	1907/2006	89/931/CEE
89/654/CEE	89/655/CEE	90/269/CEE	90/270/CEE	90/394/CEE	90/679/CEE
93/88/CEE	95/63/CE	97/42/CE	98/24/CE	99/38/CE	99/92/CE
2001/45/CE	2003/10/CE	2003/18/CE	2012/18/CE	2004/42/CE	98/24/EC
98/25/CE	1005/2009	850/2004	79/117/EEC	649/2012	
VOC Content	0% (EU, CH)				

National Regulations
National adoption of EU Directives concerning health and safety on the workplace
Relevant national laws of protection of the health of pregnant workers (national adoption of 92/85/EEC_
National adoption of EU directives concerning control of major-accident hazards involving dangerous substances (2012/18/CE). Relevant nationallaws on prevention of water pollution
National adoption of directives 75/439/CEE 0 87/101/CEE concerning disposal of used oils

Chemical safety assessment

Fr this mixture, a chemical safet assessment has not been carried out

A chemical safety assessment has been carried out for the following components of this mixture:

3(b) Lubricating oils (petroleum) c20-50 hydrotreated nuetral
Mineral base oil
1 Dicene, Dimer, Hydrogenated (68649-11-6)
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)
Reaction products of amines, dicoco alkyl and glycolic acid
Thiophene, tetrahydro, 1-1 dioxide 3 (c9-C11 branched alkyloxy) deriv, C 10 rich (398141-87-2)
1,2 propanediol, 3 amino, NN dococoalkyl derivatives
2-2 (c16-c18 (even numbered, C-18 unsaturated) alkyl imino diethanol (1218787-32-6)
2 (2 heptadec 8-enyl-2-imidazolin-1-yl) ethanol (95-38-3)

SECTION 16 - OTHER INFORMATION

Indication of Changes **Composition/information on ingredients**

Section	Changed from	Change	Notes
	SDS EU format according to Commission Regulation (EU) 2020/878		
1.1	**Formula**	**Modified**	
3	**Compsotion/information on ingredients**	**Modified**	
8.2	**PPE**	**Modified**	
9.1	**Melting Point**	**Modified**	
12.4	**Mobility in Soil**	**Added**	
12.6	**Adverse effects on environment**	**Added**	
15.1	**REACH Annex XVII**	**Modified**	

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT

TLV - Treshold Limit Value	TWA - Time weighted average
STEL - Short term exposure limit	PEL - Permission expsoure limit
GHS - Globally Harmonized System	CAS - Chemical abstract service number
ACGIH -	IMO/I
API - American Petroleum Institute	SDS - Safety Data Sheet
HMIS - Hazardous Materials Information System	NFPA - National Fire Protection Association (USA)
DOT - Department of Transport	NTP - National Toxicology Program (USA)
IARC - International agency for research on cancer	OSHA -
NCEL - New chemical exposure limit	EPA - Environmental Protection Agency
SCBA - Self contained breathing apparatus	NA - Not applicable
ND Not available	CSR - Chemical Safety Report
DNEL - Derived No effect Level	DMEL - Derived Minimum Effect Level
EC - 50 - Effective Concentration , 50%	EL50 - Effective Loading, 50%
IC 50 - Inhibition concentration, 50%	LC 50 - Lethal concentration, 50%
LD 50 -Lethal dose, 50%	LL50 - Lethal loading, 50%
LOAEL - Low observed adverse effects level	NOEL - No observed effects level
NOAEL No observed adverse effects level	OECD Organization for economic co-op and devmt
PNEC Predicted no effect concentration	PBT - Predicted, bioaccumulative, toxic
STOT - Single Target Organ Toxicity	STOT - RE (above) with repeated exposure
STOT - SE (Above) with single exposure	vPvB - Very persistent, very bioaccumulative
UVCB - susbtance of unkonw or variable composition, complex reaction products of bio materials	
WAF - Water accommodated fraction	N?A Not applicable
N/D - Not detectable or available	

ADN - European agreement concerning the international carriage of dangerous goods by inward waterways
ADR- European agrement concerning the international carriage of dangerous goods by road

ATE - Acute Toxicity estimate
BCF-Bioconcentration factor
CLP - classification labelling packaging refulation -regulation EC No. 1272/2008
IATA - Internatinal air transport association
IMDG - Internation maritime dangerous goods
NOAEC - no observed adverse effect concentration
NOEC No observed effect concentration
REACH - Registration, authorisation and restriction of chemicals, regulations No 1907/2006
RID - regulation concerning the international carriage of dangerous goods by railways
STP - sewage treatment plant
Data sources This safety data sheet is based on the real characteristics of the components and their combination, taking into account the information provided by the suppliers
Training Advice - Provide adequate training to professional operators for the use of PPEs, according to the information contained in this safety data sheet
Other information: Do not use the product for any purposes that have not been advised by the manufacturer

Full text of R-, H- and EUH-phrases

Acute Tox 4 (Oral)	Acute Toxicity (oral), category 4
Aquatic acute 1	Hazardous to the aquatic environment - acute Hazard, category 1
Aquatic chronic 1	Hazardous to the aquatic environment - CHronic Hazard, category 1
Aquatic chronic 2	Hazardous to the aquatic environment - CHronic Hazard, category 2
Aquatic chronic 3	Hazardous to the aquatic environment - CHronic Hazard, category 3
Aquatic chronic 4	Hazardous to the aquatic environment - CHronic Hazard, category 4
Eye Dam 1	Serious eye damage/eye irritation, category 1
Eye Irrt. 2	Serious eye damage/eye irritation, category 2
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit.2	Skincorrosion/irritation, category 2
Skin Sens. 1B	Sensitisation - Skin, category 1B
H 302	Harmful if swallowed
H 315	Causes Skin Irritation
H 317	May cause an allergic skin reaction
H 318	Causes serious eye damage
H 319	Causes serious eye irritation
H 361f	Supsected of damaging fertility
H 400	Very toxic to acquatic life
H 410	Very toxic to acquatic life with long lasting effects
H 411	Toxic to acqualic life with long lasting effects

Full text of R-, H- and EUH-phrases (continued)

H 412	Harmful to aquatic life with long lasting effects
H 413	May cause long lasting effects to aquatic life
R 22	Harmful if swallowed
R 36/38	Irritating to eyes/skin
R 38	Irritating to skin
R 41	Risk of serious damage to eyes
R 43	May cause sensitization by skin contact
R 50/53	Very toxic to aquatic organisms, may cause long term adverse effects to them
R 51/53	Toxic to aquatic organisms, ,may cause long term adverse effects
R 53	May cause long term adverse effects in the aquatic environment
R 62	Possible risk of impaired fertility
N	Dangerous for the environment
Xi	Irritant
Xn	Harmful

Classification and procedure used to deliver the classification for mixtures according to regulation EC 1272/2008 (CLP) Acquatic chromic 3 as per H 412 Calculation method

Prepared as per to the 29 CFR 1910.1200 (2012) and EU by United Grease and Lubricants Co LLC, PO Box 2685, Ajman,United Arab Emirates. Meets EU No. 2015/830 regulations also