

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME **All water soluble cutting oils** SAE **NA**
Product Use General purpose lubricant for metal working **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)

Skin sensitization, cat 1 H 317

Hazardous to aquatic environment - Chronic hazard - Cat 2 H 411

Other hazards (not relevant for classification)

Full text of H and EUH statements: See section 16

Adverse physicochemical, human health and environmental effects

Prolonged and repeated skin contact may cause redness, irritation and dermatitis. May cause sensitization by skin contact. Toxic to aquatic life with long lasting effects. For specific information about the toxicological and ecotoxicological properties, 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

CLP Signal word Warning

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

Hazard pictogram



GHS07 GHS09

Contains 1-2 benzoisothiazol-3(2H)-one

Hazard statements (CLP) H 317 - May cause an allergic skin reaction
 H 411 - Toxic to aquatic life with long lasting effects
 H 412 - Harmful to aquatic life with long lasting effects

Precautionary statements (CLP) P261-Avoid breathing mist, spray, vapours, fume
 P 273 - Avoid release to environment
 P 280 - Wear protective gloves, eye protection
 P403+P233 -Store in a well ventilated place. Keep container tightly closed
 P362+P364 - Take off contaminated clothing and wash before reuse
 P 391 - Collect spillage
 P 280 - Wear protective gloves, eye protection
 P501 - dispose of contents and container to according to national or local regulations

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 circuits and the like, may be accidentally injected under the skin, even without external damage. In such a case the victim should be brought to an hospital as soon as possible, to get specialized medical treatment. Do not wait for symptoms to develop

This substance/mixture 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

MATERIAL SAFETY DATA SHEET

Component	
Alcohols, C16-C18 and C18-unsaid, ethoxylated (68920-66-1)	This substance/mixture 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
Pyridine-2-thiol 1-oxide, sodium salt (3811-73-2)	This substance/mixture 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
1-2 benzisothiazol-3(2H)-one (2634-33-5)	This substance/mixture 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	
Alcohols, C16-C18 and C18-unsaid, ethoxylated (68920-66-1)	The substance is 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 Regulation (EU) 2018/605
Pyridine-2-thiol 1-oxide, sodium salt (3811-73-2)	The substance is 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 Regulation (EU) 2018/605
1-2 benzisothiazol-3(2H)-one (2634-33-5)	The substance is 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 Regulation (EU) 2018/605

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS (SUBSTANCES)

Not applicable

3.2 Mixtures

Mixture of hydrocarbons
Additives Solvents

Hazardous ingredients and/or with relevant occupational exposure limits

Name	Product Identifier	%	Classification according to Regulation 1272/2008
Alcohols, C16-C18 and C18-unsaid, ethoxylated (68920-66-1) (Solvent)	CAS 68920-66-1 EC 500-236-9 ECINo. NA REACH No. 01-2119489407-26	>2,5 to 5	Skin Irrit 2 H 315 Aquatic Chronic 2, H 411
Alcohols, C14-15 branched (Solvent)	CAS 941-188-2 EC NA ECINo. NA REACH No. ND	>2,5 to 5	Aquatic Chronic 1, H 410

MATERIAL SAFETY DATA SHEET

Pyridine-2-thiol 1-oxide, sodium salt (3811-73-2) (Additive)	CAS 3811-73-2 EC 220-296-5 ECINo. NA REACH No. 01-2119493385-28	>0.01-0.25	Acute tox 4 (oral) H 302 (ATE=500 mg/kg BW) Acute tox 4 (dermall) H 312 (ATE=1100 mg/kg BW) Acute tox 4 (inhal) H 332 Skin Irrit 2 H 315 Eye irrit 2 H 319 Aquatic acute 1, H 400 Aquatic chronic 1 H 410
1-2 benzoisothiazol-3(2H)-one (2634-33-5) (additive)	CAS 2634-33-5 EC 220-120-9 ECINo. 613-088-00-6 REACH No. 01-2120761540-60	>0.05-0.25	Acute tox 4 (oral) H 302 (ATE=597 mg/kg BW) Skin Irrit 2 H 315 Eye Dam 1 H 318 Aquatic acute 1, H 400 Skin sens 1, H 317

Specific Concentration Limits

Name	Product Identifier	Specific concentration limits
1-2 benzoisothiazol-3(2H)-one (2634-33-5) (additive)	CAS 2634-33-5 EC 220-120-9 ECINo. 613-088-00-6 REACH No. 01-2120761540-60	(0.05 <C <100) skin sens 1, H 317

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

Symptoms/injuries (general indications)	Prolonged and repeated skin contact may cause redenning irritation and dermatitis
Systems/Injuries after inhalation	None under normal conditions at ambient temperatures
Systems/Injuries after skin contact	Irritation may arise in case of repeated or prolonged exposure Prolonged or repeated contact may cause skin to become dry. May casue sensitization b skin contact Contact with hot product may casue thermal burns
Systems/Injuries after eye contact	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

MATERIAL SAFETY DATA SHEET

gastric disturbances.

Symptoms/injuries upon intravenous administration

No information available

Chronic symptoms None known**Indication of any immediate medical attention and special treatment needed**

Obtain medical attention if casualty has an altered state of consciousness or if symptoms do not resolve.

SECTION 5 - FIRE FIGHTING MEASURES**EXTINGUISHING MEDIA**Dry powder, CO₂, water spray, other extinguishing gases (as per regulation)

These means should be used by trained personnel only.

UNSUITABLEDo not use a heavy water jets. They could cause splattering, and spread the fire
Simultaneous use of foam and water on the same surface is to be avoided as
water destroys the foam**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 levelsHeat may build pressure in tank and containers, rupturing closed vessels, spreading fire and
increasing the risk of burns and injuries. Vapours are heavier than air, spread along the floors
and form explosive mixtures with air**Explosion Hazard**In case of losses from pressurised circuits, the sprays may form mists. Take
into account that in this case the lower explosion limit for mists is about 45g/m³ of air**Hazardous decomposition products in case of fire**Incomplete combustion releases dangerous carbon monoxide, carbon dioxide
and other toxic gases NO_x, H₂S, SO_x, oxygenated compounds (aldehydes etc.; PO_x
XNO_x, CaO_x**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 ProceduresKeep 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 spillage: full body suit of chemically resistant and antistatic mtl
necessary heat resistant and insulated. Work gloves providing adequate
chemical resistance, specifically to aromatic hydrocarbons. Gloves made ofRevision No **1**Revision Date **25-Jul-23**Product **All water soluble cutting oils**Page **4** of **16**

MATERIAL SAFETY DATA SHEET

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. Notify local authorities according to relevant regulations.

Emergency Procedures

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 relevant regulations regarding handling 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 transfer and mixing operations, ensure that all equipment is correctly grounded. Avoid the build up of electric charges. Provide good ventilation in process area to prevent formation of vapour. Keep away from sources of ignition. No smoking. Store in dry, well ventilated area. Do not breathe fume/mist/vapours. Because of the extremely slippery nature of this material, more care than usual must be exercised in material handling practices to keep 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

Revision No 1

Revision Date 25-Jul-23

Product

All water soluble cutting oils

Page 5 of 16

MATERIAL SAFETY DATA SHEET

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 45 deg C

Hygiene 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. Do not clean hands with dirty or oil soaked rags. Do not reuse clothes. If they are still contaminated, keep away from food and beverages

Conditions for safe storage, including any incompatibilities

Storage 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 45 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 steel. Some synthetic materials may be unsuitable for containers or containing linings depending upon the material 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

DNEL/DMEL/PNEC (additional information)

All water soluble cutting oils Not applicable

Alcohols, C16-C18 and C18-unsaid, ethoxylated (68920-66-1) (Solvent)

DNEL/DMEL (workers)

Long term systemic effect, inhalation 294 mg/m³
Long term systemic effect, dermal 2080 mg/kg of body weight/ day

Long term local effects Inhalation

DNEL/DMEL (General Population)

Long term systemic effect, oral 25 mg/kg of body weight/ day
Long term systemic effect, inhalation 87 mg/m³
Long term systemic effect, dermal 1250 mg/kg of body weight/ day

PNEC Water

PNEC aqua (freshwater) 0.0072 mg/L

PNEC aqua (marine water) 0.0007 mg/L

PNEC aqua (intermittent, fresh water) 0.1 mg/L

PNEC Sediment

PNEC sediment (freshwater) 22.79 mg/kg dwt

Revision No 1

Revision Date 25-Jul-23 Product All water soluble cutting oils Page 6 of 16

MATERIAL SAFETY DATA SHEET

PNEC sediment (marine water)	2.28 mg/kg dwt
PNEC Soil	1 mg/m ³ dwt
PNEC STP	10 g/l
1-2 benzoisothiazol-3(2H)-one (2634-33-5) (additive)	
DNEL/DMEL (workers)	
Long term systemic effect, inhalation	6.91 mg/m ³
Long term systemic effect, dermal	0.966 mg/kg of body weight/ day
Long term local effects Inhalation	
DNEL/DMEL (General Population)	
Long term systemic effect, oral	
Long term systemic effect, inhalation	1.2 mg/m ³
Long term systemic effect, dermal	0.345 mg/kg of body weight/ day
PNEC Water	
PNEC aqua (freshwater)	4.03 µg/L
PNEC aqua (marine water)	0.403 µg/L
PNEC aqua (intermittent, fresh water)	1.1 µg/L
PNEC aqua (intermittent, marine water)	110 µg/L
PNEC Sediment	
PNEC sediment (freshwater)	49.9 µg/kg dwt
PNEC sediment (marine water)	4.99 µg/kg dwt
PNEC Soil	3 mg/m ³ dwt
PNEC STP	1.03 g/l

Pyridine-2-thiol 1-oxide, sodium salt (3811-73-2) (Additive)

DNEL/DMEL/PNEC (additional information)

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 society committee for occupation exposure limit (SCOEL), or the American conference of governmental industrial hygienists (ACGIH). OELs are considered to be safe exposure 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 exposure 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, flammability 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, gas mask with filter for organic vapours (A) or organic vapours /H2S (A+B)

Personal Protective Equipment (Symbol(s)):



MATERIAL SAFETY DATA SHEET

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 characteristics 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 immediately in case of cuts, holes or other signs of damages or degradation. If necessary refer to the EN 374 standards. 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 to national standards or to the EN 166 standard
Respiratory Protection	No respiratory protection is normally required with sufficient ventilation. Independently from other substances action (technical modifications, operating procedures, and other means to limit the exposure of workers) personal protection equipment can be used according to necessity. Open or well ventilated spaces; if product is handled without adequate containment; 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

Do not discharge the product into the environment. Storage areas/installations should be designed with adequate bunds so as to prevent ground and water pollution in case of leaks or spills. Onsite wastewater treatment required. Prevent discharge of undissolved substances to or recover from onsite wastewater. DO not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed

Consumer exposure controls

Not applicable

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Attention:	The data below are typical values and do not constitute a specification	
Color		Light, bright and clear
Physical State		Liquid
Odor		Characteristic
Odor Threshold		No data available
pH		8.4-9 (at 5%)
Vapor Pressure		No data available
Boiling Point		No data available
Solubility		Miscible with water
Pour Point deg C D 97		-12 deg C D 97

MATERIAL SAFETY DATA SHEET

Boiling Point	>200 DEG c (cas 101316-72-7_
FlashPoint	>105 deg c (D 93)
Freezing point,deg C	≈ 0 deg C (cas 101316-72-7)
Density	0.9 - 0.91 kg/L @ 20°C (Typical)
Viscosity	52 cst at 40 deg C (D445)
Log Kow	Not applicable for mixtures
Evaporation Rate	No data available
Decomposition Temperature	No data available
Octanol/Water Partition Coefficient	No data available
VOC Content	No data available
Flammability	No data available
Explosive properties	None
Oxidising properties	None
Explosive limits	No data available
Lower explosion limit	No data available
Upper explosion limit	None
Autoignition temperature	No data available
Log Kow	Not applicable for mixtures
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 mixture does not offer any further hazard, except what is reported in the following paragraphs

Chemical Stability

Stable product 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 with strong oxidisers (peroxides, chromates etc) may cause a fire hazard. A mixture with nitrates and other strong oxidisers (chlorates, perchlorates, liquid oxygen) may create an explosive mass. Sensitivity to heat, friction or shock cannot be assessed in advance

Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition

Hazardous decomposition products

In exceptional cases (prolonged storage in tanks contaminated with water and presence of anaerobic bacteria sulfate reducing microbial colonies), the product may undergo a degradation and generate small amounts of sulfur compounds, including H₂S

SECTION 11 - TOXICOLOGICAL 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)
Additional information	According to composition

All water soluble cutting oils

LC 50 Inhalation rat	>5 mg/l/ (4 hours) (OECD 403)
ATE CLP (vapours)	5 mg/l/ (4 hours) (OECD 403)
ATE (dust, mist)	5 mg/l/ (4 hours) (OECD 403)
Alcohols, C16-C18 and C18-unsaid, ethoxylated (68920-66-1) (Solvent)	
LD 50 Oral rat	>2000 mg/kg of body weight (OECD 401)
LD 50 dermal rabbit	>3000 mg/kg of body weight (OECD 402)
LC 50 Inhalation rat	1.6 mg/l/ (4 hours) (OECD 403)

MATERIAL SAFETY DATA SHEET

Alcohols, C14-15- branched	
LD 50 Oral rat	>5000 mg/kg of body weight (OECD 401)
LD 50 dermal rabbit	6180 mg/kg of body weight (OECD 402)
LC 50 Inhalation rat	
Pyridine-2-thiol 1-oxide, sodium salt (3811-73-2) (Additive)	
LD 50 Oral rat	1208 mg/kg of body weight (OECD 401)
LD 50 dermal rabbit	1800-1900 mg/kg of body weight (OECD 402)
LC 50 Inhalation rat	1.4 mg/l/4H (EPA OPP 81-3) EU Method B.2
1-2 benzoisothiazol-3(2H)-one (2634-33-5) (additive)	
LD 50 Oral rat	597 mg/kg of body weight (OECD 401)
LD 50 dermal rabbit	>2000 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 8.4 to 9 (at 5%)
Serious eye damage/irritation	Not classified (based on available data, the classification criteria are not met) pH 8.4 to 9 (at 5%)
Respiratory or skin sensitization	Not classified (based on available data, the classification criteria are not met)
Additional information	According to composition This product 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 benzoisothiazol -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)	May casue drowsiness or dizziness
Specific target organ Repeated exposure	Overexposure to vapours may casue irritation to airways, nausea and dizziness According to composition
1-2 benzoisothiazol-3(2H)-one (2634-33-5) (additive)	
NOAEL (female ratF1)	56.6 mg/kg bodyweight
Pyridine-2-thiol 1-oxide, sodium salt (3811-73-2) (Additive)	
LOAEL (male rat, F1)	2.8 mg/kg bodyweight/day
LOAEL (female rat F1)	1.4 mg/kg bodyweight/day
NOAEL (male rat.F1)	1.4 mg/kg bodyweight/day
NOAEL (female rat.F1)	0.7 mg/kg bodyweight/day
LOAEL oral rat	1.5 mg/kg bodyweight
LOAEC inhalation, rat, vapour	8.1 mg/m3
NOAEL oral rat	0.5 mg/kg bodyweight
NOAEL (oral, rat.rabbit, 90 days)	5-15 mouse
Alcohols, C16-C18 and C18-unsaid, ethoxylated (68920-66-1) (Solvent)	
LOAEL (oral, rat, 90 days)	>5000 mg/kg bodyweight
Pyridine-2-thiol 1-oxide, sodium salt (3811-73-2) (Additive)	
LOAEL (oral, rat, 90 days)	1.5 mg/kg bodyweight
NOAEL (oral, rat, 90 days)	0.5 mg/kg bodyweight
Revision No	1
Revision Date	25-Jul-23
Product	All water soluble cutting oils
Page	10 of 16

MATERIAL SAFETY DATA SHEET

Aspiration hazard Not classified (based on available data, the classification criteria are not met)
 Viscosity >52 cst at 40 deg C (D445)

Information on other hazards

Endocrine disrupting properties None known. The 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 not identified or having endocrine disrupting properties in accordance with the criteria set out in commission delegated regulation (EU) 2017/2012 or commission regulation (EU) 2018/605

Other information

Potential adverse human effects and symptoms Contact with eyes may cause temporary reddening and irritation. Irritant to skin, high concentration of vapours may induce; headache, nausea, dizziness. Avoid all eye and skin contact and do not breath vapour and mist

Other information None

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 and 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

Alcohols, C16-C18 and C18-unsaid, ethoxylated (68920-66-1) (Solvent)

LC 50 fish 1	108 mg/L (LL 50, OECD 203)
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Alcohols, C14-15- branched

LC 50 fish 1	>500 mg/l (OECD 203)
EC50 Daphnia 1	3.2 mg/l (EL 50, OECD 202)
EcC50 72h = algae	0.1 - 1 mg/l (OECD 201)
EC50 Daphnia 2	1700 mg/l (EL 50, OECD 202)

1-2 benzoisothiazol-3(2H)-one (2634-33-5) (additive)

LC 50 fish 1	=16.7 mg/l
LC 50 fish 2	=2.15 mg/l
LC 50 Other aquatic organisms	0.74 mg/l
EC50 Daphnia 1	2.94 mg/l
EC50 Daphnia 2	2.94 mg/l

Pyridine-2-thiol 1-oxide, sodium salt (3811-73-2) (Additive)

LC 50 fish 1	=7.3 µg/l
LC 50 fish 2	=0.0066 mg/l
EcC50 72h = algae	0.22 mg/l
EC50 Daphnia 1	0.6 mg/l
EC50 Daphnia 2	0.022 mg/l

PERSISTENCE AND DEGRADABILITY

All water soluble cutting oils

Persistence and degradability Not established

Alcohols, C14-15- branched

BOD (% of ThOD) > 60% ThOD

MATERIAL SAFETY DATA SHEET

BIO ACCUMULATIVE POTENTIAL

All water soluble cutting oils

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

1-2 benzoisothiazol-3(2H)-one (2634-33-5) (additive)

Bio concentration factor	3.2
Log POW	0.6

Mobility in Soil

All water soluble cutting oils

Ecology Soil	No data available
Mobility in soil	Not determined

Lubricating oils (petroleum) C24-50 hydrotreated neutral oil-based, Baseoil - unspecified

Ecology Soil The test methods for this end point are not applicable to UVCB substances

Kerosene (Petroleum), hydrodesulfurized (64742-81-0)

Ecology Soil The test methods for this end point are not applicable to UVCB substances

Results of PBT and vPvB assessment

All water soluble cutting oils

This substance/mixture 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 such as alcohols, pyridine and benzoisothiazol) The components in this formulation do not meet the criteria for classification as PBT or vPvB. The product should be considered 'persistent' in the environment according to the REACH Annex XIII criteria (Point 1.1)

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 identified 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 sewers, 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 considerations and indication	European Waste Catalogue code (s) (Decision 2001/118/CE): 12 01 07* (mineral based machining oils free of halogens (except emulsions and solutions) 12 01 09(machining emulsions and solutions free of halogens. This EWC code is only a general indication 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 actual use
Additional information	Do not cut, weld, bore, or alter the product, alterations and contaminations
Ecology- waste materials	and declared safe
EURAL Code (EWC)	The product as it is does not contain halogenated substances 12 01 07 - Mineral based machine oils free of halogens 12 01 09 - machining emulsions and solutions free of halogens

SECTION 14 - TRANSPORT INFORMATION

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

MATERIAL SAFETY DATA SHEET

ADR	IMDG	IATA	ADN	RID
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UN Number or ID Number				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082

UN Proper shipping name				
Environmentally hazardous substance, liquid, NOS	Environmentally hazardous substance, liquid, NOS	Environmentally hazardous substance, liquid, NOS	Environmentally hazardous substance, liquid, NOS	Environmentally hazardous substance, liquid, NOS

Transport document description				
UN 3082 Environmentally hazardous substance, liquid, NOS (alcohols C16-18 and C 18 unsat ethoxylated, 9, III, (-)	UN 3082 Environmentally hazardous substance, liquid, NOS (alcohols C16-18 and C 18 unsat ethoxylated, 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, NOS (alcohols C16-18 and C 18 unsat ethoxylated, 9, III, (-)	UN 3082 Environmentally hazardous substance, liquid, NOS (alcohols C16-18 and C 18 unsat ethoxylated, 9, III, (-)	UN 3082 Environmentally hazardous substance, liquid, NOS (alcohols C16-18 and C 18 unsat ethoxylated, 9, III, (-)

Transport hazard class(es)				
9	9	9	9	9

Packing Group				
III	III	III	III	III

Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes MARINE POLLUTANT	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes

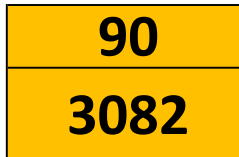
No supplementaty information available

Overland transport

Transport regulations (ADR)
 Classification code (UN)
 Limited quantities (ADR)
 Excepted quantites (ADR)
 Transport category (ADR)
 Hazard Identification number (Kemler 2)
 Orange Plates

Subject to regulations

M6
 5I
 E1
 3
 90



Tunnel restriction code

-

Transport by Sea

Transport regulations (IMDG)
 IBC Packing instructions (IMDG)
 Limited quantities (IMDG)
 Excepted quantites (ADR)
 EmS no Fire
 EmS No Spillage
 Stowage category (MDG)

Subject to regulations

5 L
 E1
 IBC03
 F-A
 S-F
 A

MATERIAL SAFETY DATA SHEET

Air transport

Transport regulations (IATA)	Subject to regulations
PCA Excepted quantities IATA	E1
PCA Limited qty max net qty IATA	30 kgG
PCA Max net quantity IATA	450 ml
CAO max net quantity IATA	450 ml

Inland waterway transport

Transport regulations (ADN)	Subject to regulations
Classification code (ADN)	M6
Limited quantities (ADN)	5L
Excepted quantities (ADN)	E1

Rail transport

Transport regulations ((RID))	Subject to regulations
Classification code ((RID))	M6
Limited quantities ((RID))	5L
Excepted quantities ((RID))	E1
Transport category ((RID))	3
Hazard Identification number (RID)	90

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) Soluble cutting oil; alcohols C16-C18 and C-18 unsat, ethoxylated	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 3.9/3.10
3(c) All water soluble cutting oils Alcohols, C-18-C18 and C18-unsat, ethoxylated, alcohols C14-C15 branched	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 4.1

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 parliament and of the council

Contains no substance subject to regulation EU No. 2019/1021 of the European parliament 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 parliament and of the council

Contains no substance listed in POP List EU No. 649/2012 of the European parliament and of the council

Contains no substance listed in ozone depletion list EU No. 1005/2009

Contains no substance listed in explosive precursors 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 20% (EU, CH)

Saveso additional information **E2**

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_

Relevant national laws on protection of the health of pregnant workers (Dir 92/85/EEC)

MATERIAL SAFETY DATA SHEET

substances (2012/18/CE). Relevant national laws on prevention of water pollution
 National adoption of directives 75/439/CEE 0 87/101/CEE concerning disposal of used oils

Chemical safety assessment

For this mixture, a chemical safety assessment has not been carried out

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

Pyridine-2-thiol 1-oxide, sodium salt (3811-73-2) (Additive)
Alcohols C16-C18 and C-18 unsat, ethoxylated
1-2 benzisothiazol-3(2H)-one (2634-33-5) (additive)

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	
15.1	Saveso (EU)	Added	

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT

TLV - Treshold Limit Value	TWA - Time weighted average
STEL - Short term exposure limit	PEL - Permission exposure 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 - substance of unknown 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 agreement concerning the international carriage of dangerous goods by road

ATE - Acute Toxicity estimate

BCF-Bioconcentration factor

CLP - classification labelling packaging regulation -regulation EC No. 1272/2008

IATA - International air transport association

IMDG - International 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

MATERIAL SAFETY DATA SHEET

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	Skin corrosion/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) Skin sen 1 H 317: aquatic chronic 2 H 411

**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**

Revision No	1	Product	All water soluble cutting oils	Page	16	of	16
Revision Date	25-Jul-23						