

SAFETY DATA SHEET

Issue Date 22-May-2017

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Version 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier Product Name

MICROLUBE GB 0

Other means of identification Product code: UN-No: Synonyms

020232 UN3077 None

Recommended use of the	chemical and restrictions on use
Recommended Use	Lubricant.
Uses advised against	Consumer use

Details of the supplier of the safety data sheet Supplier Address Klüber Lubrication NA LP 32 Industrial Drive Londonderry, NH 03053 Phone: (603) 647-4104 Fax: (603) 647-4106

Emergency telephone number Emergency Telephone

CHEMTREC: 1-800-424-9300; INTERNATIONAL: (703) 527-3887

2. HAZARD IDENTIFICATION

Classification

WHMIS 2015 Regulatory Status

This chemical is considered hazardous by the Canadian Hazardous Products Regulations (WHMIS 2015).

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1

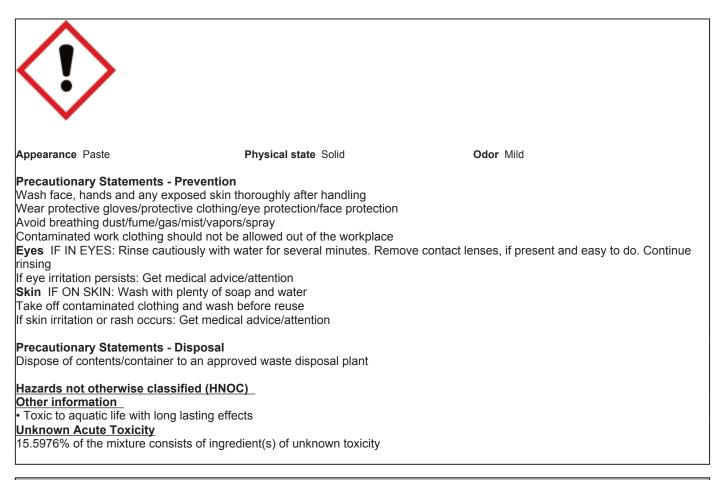
Label Elements

EMERGENCY OVERVIEW

Signal word Warning

Hazard statements Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction





3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is considered hazardous by the Canadian Hazardous Products Regulation (WHMIS 2015).

Components	CAS-No	Weight %	Trade Secret
Mineral Oil	Proprietary	70 - 80%	*
Silica	Proprietary	0 - 10%	*
Amines, C12-14-alkyl, reaction products with hexanol, phosphorus oxide (P2O5), phosphorus sulfide (P2S5) and propylene oxide	91745-46-9	1 - 2.5%	*
Zinc, dithiophosphate di-C1-14-alkyl esters	68649-42-3	1 - 3%	*

4. FIRST AID MEASURES

First aid measures

Eye contact:

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin contact:

Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.



MICROLUBE GB 0

Inhalation:	Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. If symptoms persist, call a physician.
Ingestion:	Do not induce vomiting. Consult a physician.
Most important symptoms and effect	cts, both acute and delayed
Symptoms	No information available.
Indication of any immediate medical attention and special treatment needed	
Notes to physician:	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Carbon dioxide (CO2). Dry chemical. Dry sand. Water spray mist or foam.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire **Specific hazards arising from the chemical** Thermal decomposition can lead to release of irritating gases and vapors. Water may be used to cool closed containers.

Hazardous combustion products Carbon oxides. Nitrogen oxides (NOx). Oxides of sulfur. Phosphorus oxides.

Explosion data Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Special protective equipment for firefighters:

In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus. Standard procedure for chemical fires.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions:	Contaminated surfaces will be extremely slippery. Avoid contact with skin, eyes and clothing. Wear personal protective equipment.
Environmental precautions	
Environmental precautions:	Do not allow material to contaminate ground water system. Prevent product from entering drains.
Methods and material for containm	ent and cleaning up
Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up:	Scrape-up. Pick up and transfer to properly labelled containers. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling

Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.



Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Keep cool. Keep in properly labelled containers. Keep away from heat and sources of ignition. Handle and open container with care

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines				
Components		ACGIH TLV	OSHA (TWA mg/m ³):	IDLH:
Silica -		-	0.8 mg/m ³	
Appropriate engineering controls		- -		
Engineering measures to reduce exposure:	Ensure	e adequate ventilation, espec	cially in confined areas.	
Individual protection measures, su	ch as pe	ersonal protective equipme	nt	
Respiratory protection:	No per	rsonal respiratory protective	equipment normally required.	
Hand protection:	Imper\	vious gloves		
Eye protection:	Safety	glasses with side-shields		
Skin and body protection:		safety precautions while han t this potential effect	dling the product will provide	adequate protection
General Hygiene Considerations	0	contact with skin, eyes and c	lothing	

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance F		Odor Mild	Color Red		Odor thresholdNo information available
<u>Property</u> Melting point/freezing point	<u>Values</u> No information available	<u>Remarks • Method</u>	pH Boiling point / boiling range	Not applicable No information available	
Flash point	Not Applicable	ISO 2592	Evaporation rate	No information available	
Flammability (solid, gas) Upper flammability	No information available No information available		Flammability Limit in Air Lower flammability	No information available	
limit: Vapor pressure	< 0.001 hPa, 20 °C)	limit: Vapor density	No information available	
Specific Gravity Solubility in other solvents Autoignition temperature Kinematic viscosity Explosive pro Oxidizing pro	No information available No information available perties	No information available No information available	Water solubility Partition coefficient Decomposition temperature Dynamic viscosity	Insoluble in water No information available nNo information available No information available	

Other information

Softening point	
Molecular weight	
VOC Content (%)	
Density	
Bulk density	

No information available No information available No information available No information available No information available

10. STABILITY AND REACTIVITY

Chemical stability Stabil
Possibility of Hazardous Reactions None under normal processing. Reactions None under normal processing.
Reactions
Conditions to avoid
Conditions to avoid Heat, flames and sparks Hazardous Decomposition Products
Hazardous Decomposition None under normal processing Products Incompatible materials
Incompatible materials Strong oxidising agents
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known or supplied information
Eye contact	Irritating to eyes.
Skin contact	Irritating to skin. May cause sensitization by skin contact.
Inhalation	Vapors and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Components	Oral LD50	Dermal LD50	Inhalation LC50
Mineral Oil -	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 2.18 mg/L (Rat)4 h
Silica -	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2.2 mg/L (Rat)1 h
Amines, C12-14-alkyl, reaction products with hexanol, phosphorus oxide (P2O5), phosphorus sulfide (P2S5) and propylene oxide - 91745-46-9	> 10000 mg/kg (Rat)	-	-

Information on toxicological effects

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization

May cause sensitization by skin contact.



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Mutagenic effects:	Did not show mutagenic or teratogenic effects in animal experiments.
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen.
Components	Silica -
ACGIH	-
IARC:	Group 3
NTP Report on Carcinogens List -	-
OSHA	-
Reproductive toxicity	This product does not contain any known or suspected reproductive hazards.
STOT - Single Exposure	None under normal use conditions.
STOT - Repeated Exposure	None under normal use conditions.
Aspiration hazard	Not applicable.
Aspiration hazard	Not applicable.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity	15.5976% of the mixture consists of ingredient(s) of unknown toxicity	
The following values are calculated based on chapter 3.1 of the GHS document		
ATEmix (oral)	5065 mg/kg	
ATEmix (dermal)	2428 mg/kg	

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

14.0976% of the mixture consists of components(s) of unknown hazards to the aquatic environment

	Mineral Oil -	
Algae/aquatic plants	-	
Fish	5000: 96 h Oncorhynchus mykiss mg/L LC50	
Crustacea	1000: 48 h Daphnia magna mg/L EC50	
	Silica -	
Algae/aquatic plants	440: 72 h Pseudokirchneriella subcapitata mg/L EC50	
Fish	5000: 96 h Brachydanio rerio mg/L LC50 static	
Crustacea	7600: 48 h Ceriodaphnia dubia mg/L EC50	
Amines, C12-14-alkyl, reaction produc	cts with hexanol, phosphorus oxide (P2O5), phosphorus sulfide (P2S5) and propylene oxide - 91745-46-9	
Algae/aquatic plants	-	
Fish	16 - 26: 96 h Pimephales promelas mg/L LC50 semi-static	
Crustacea	-	
	Zinc, dithiophosphate di-C1-14-alkyl esters - 68649-42-3	
Algae/aquatic plants	-	
Fish	1.0 - 5.0: 96 h Pimephales promelas mg/L LC50 static 10.0 - 35.0: 96 h Pimephales promelas mg/L LC50 semi-static	
Crustacea	1 - 1.5: 48 h Daphnia magna mg/L EC50	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

The product is insoluble and floats on water.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods



Disposal of wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

DOT UN-No: Proper shipping name: Hazard Class: Packing group:	Not regulated by ground transportation only. UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ((Z)-octadec-9-enylamine, Phenol, heptyl derivatives) 9 PGIII
<u>TDG</u>	UN3077
UN-No:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Proper shipping name:	((Z)-octadec-9-enylamine, Phenol, heptyl derivatives)
Hazard Class:	9
Packing group:	PGIII
IATA-DGR	UN3077
UN-No:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Proper shipping name:	((Z)-octadec-9-enylamine, Phenol, heptyl derivatives)
Hazard Class:	9
Packing group:	PGIII
IMO / IMDG	UN3077
UN/ID No.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Proper shipping name	((Z)-octadec-9-enylamine, Phenol, heptyl derivatives)
Hazard Class	9
Packing group	PGIII
EmS:	F-A, S-F
Marine pollutant	Marine pollutant

15. REGULATORY INFORMATION

International Inventories	
TSCA:	Listed in TSCA
DSL:	All of the components in this product are listed in DSL
EINECS/ELINCS	This product complies with EINECS/ELINCS
CHINA:	This product complies with China IECSC.
KECL:	This product does not comply with Korea KECL.
PICCS:	This product does not comply with Philippines PICCS.
AICS:	This product does not comply with Australia AICS

Legend: TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Canada HPR Statement

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations and the SDS contains all the information required by the Hazardous Products Regulations (WHMIS 2015).

US Federal Regulations

<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Components	SARA 313 Threshold:
Zinc, dithiophosphate di-C1-14-alkyl esters	Zinc compound (1%)
SARA 311/312 Hazard Categories	
Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

State Regulations (RTK)

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Components	NJRTK:	MARTK:	PARTK:
Silica -	Substance no. 3510 Listed.	Listed.	Listed.
Zinc, dithiophosphate di-C1-14-alkyl esters - 68649-42-3	Substance no. 3012 Listed	Not Listed	Listed

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

<u>Nfpa:</u> Health: 2 Flammability: 1 Instability 0 NFPA/HMIS * for Carc, Muta, Tera, Specific Organ * <u>HMIS health rating:</u> Health: 2 Flammability: 1



Physical hazards 0 Personal protection B

Issue Date	22-May-2017
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Revision Note	
Not applicable	
Disclaimer	

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

