

Issue Date 17-Jul-2019

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Version 3

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

Product identifier

Product Name MICROLUBE GB 00

Other means of identification

Product code: 020236

UN-No: UN3077

Synonyms 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 NCEC: 1-215-207-0061

2. HAZARD IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
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

**Appearance** Paste**Physical state** Solid**Odor** Mild**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Contaminated work clothing should not be allowed out of the workplace

Eyes IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

Skin IF ON SKIN: Wash with plenty of soap and water

Take off contaminated clothing and wash before reuse

If skin irritation or rash occurs: Get medical advice/attention

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other information**

- Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical name	CAS No.	Weight-%	Trade Secret
Mineral Oil	Proprietary	60 - 80%	*
Amines, C12-14-alkyl, reaction products with hexanol, phosphorus oxide (P2O5), phosphorus sulfide (P2S5) and propylene oxide	91745-46-9	1 - 5%	*
Zinc, dithiophosphate di-C1-14-alkyl esters	68649-42-3	1 - 5%	*
9-octadecenylamine	112-90-3	0.1 - 1%	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

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.

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 effects, 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 (NO_x). Sulfur 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. Avoid subsoil penetration.

Methods and material for containment 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 parametersExposure Guidelines

Chemical name	ACGIH TLV	OSHA (TWA mg/m ³):	IDLH:
Mineral Oil -	5 mg/m ³ (oil mist)	5 mg/m ³ (oil mist)	

Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Respiratory protection: No personal respiratory protective equipment normally required.
Hand protection: Impervious gloves
Eye protection: Safety glasses with side-shields
Skin and body protection: Usual safety precautions while handling the product will provide adequate protection against this potential effect
General Hygiene Considerations Avoid contact with skin, eyes and clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties**Physical state** Solid**Appearance** Paste**Odor** Mild**Color** Red brown**Odor threshold** No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>		
Melting point/freezing point	No information available		pH	Not classified
Flash point	Not Applicable	ISO 2592	Boiling point / boiling range	No information available
Flammability (solid, gas)	No information available		Evaporation rate	No information available
Upper flammability limit:	No information available		Flammability Limit in Air	
Vapor pressure	< 0.001 hPa, 20 °C		Lower flammability limit:	No information available
Specific Gravity	0.90		Vapor density	No information available
Solubility in other solvents	No information available		Water solubility	Insoluble in water
Autoignition temperature	No information available		Partition coefficient	No information available
Kinematic viscosity	No information available		Decomposition temperature	No information available
Explosive properties		No information available	Dynamic viscosity	No information available
Oxidizing properties		No information available		

Other information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Liquid Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity

Not classified

Chemical stability

Stability	Stable under normal conditions
Possibility of Hazardous Reactions	

Possibility of Hazardous Reactions	None under normal use conditions.
Hazardous polymerization	Hazardous polymerization does not occur.

Conditions to avoid

Conditions to avoid	Heat, flames and sparks
Hazardous Decomposition Products	

Hazardous Decomposition Products	None under normal use conditions
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Incompatible materials

Incompatible materials	Strong oxidising agents
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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.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Mineral Oil -	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 2.18 mg/L (Rat) 4 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.
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 classified.

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)	5151 mg/kg
ATEmix (dermal)	2247 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

14.0976 % of the mixture consists of component(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
Amines, C12-14-alkyl, reaction products 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: UN3077
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
((Z)-octadec-9-enylamine)
Hazard Class: 9
Packing group: PGIII

TDG

UN-No: UN3077
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
((Z)-octadec-9-enylamine)
Hazard Class: 9
Packing group: PGIII

IATA-DGR

UN-No: UN3077
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
((Z)-octadec-9-enylamine)
Hazard Class: 9
Packing group: PGIII

IMO / IMDG

UN/ID No. UN3077
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
((Z)-octadec-9-enylamine)
Hazard Class: 9
Packing group: PGIII
EmS: F-A, S-F
Marine pollutant: Marine pollutant

15. REGULATORY INFORMATION**US Federal Regulations**

SARA 313

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

Chemical name	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

Chemical name	NJRTK:	MARTK:	PARTK:
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 classified

16. OTHER INFORMATION**NFPA:**

Health: 2

Flammability: 1

Instability 0

NFPA/HMIS * for Carc, Muta, Tera, Specific Organ *

HMIS health rating:

Health: 2

Flammability: 1

Physical hazards 0

Personal protection B

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Revision Note

Reason for revision: None

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