

No Hazardous Substance(s) or Complex Substance(s) required for disclosure. As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

SECTION 4 - FIRST AID MEASURES

- Eye contact:** Flush eye with water for 15 minutes. If symptoms persist, call a physician.
- Skin contact:** Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If skin irritation persists, call a physician.
- Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms persist, call a physician.
- Ingestion:** Do not induce vomiting. If conscious, drink plenty of water. Obtain medical attention.

Material Name: Bio-Penetrating Lubricant (BPL) Page 2 of 6
Issue Date: 15 May 2015

Precautions for safe handling

Handling: Handle in accordance with good industrial hygiene and safety practice. Keep containers closed when not in use. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep containers tightly closed and store in a cool well-ventilated place free of contaminants. Empty containers may retain product properties. Follow all MSDS / Label warnings after container is emptied. No special storage precautions required.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Components	ACGIH TLV	OSHA (TWA mg/m 3):	IDLH
Oil Mist	5 mg/m 3	5 mg/m 3	

Appropriate engineering controls

Engineering measures to reduce exposure: Use only in area provided with appropriate exhaust ventilation.

Individual protection measures, such as personal protective equipment

Respiratory protection: No personal respiratory protective equipment normally required. In case of insufficient ventilation wear suitable respiratory equipment.

Hand protection: Nitrile rubber Neoprene gloves

Eye protection: Safety glasses

Skin and body protection: Impervious clothing

General Hygiene Considerations: Avoid contact with skin, eyes and clothing

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Typical information on basic physical and chemical properties

Specific Gravity (H₂O = 1):	.88 @ 15.6°C
Flash Point (PMCC):	146°C (295°F)
Kinematic viscosity:	13 cSt @ 40°C
Pour Point:	-30°C (-22°F)
Explosive properties:	Material does not have explosive properties.
Oxidizing properties:	See Section 2, No significant hazards.
Volatile Organic Compound (VOC):	Components contain No VOC according to CARB
Physical state	Liquid
Appearance	Oil
Odor	Mild
Color	Light yellow liquid
Odor threshold	Not Determined
Melting: point/freezing point:	Not Determined
Boiling point /boiling range:	Not Determined
Flammability (solid, gas):	Not Determined
Flammability Limit in Air	Not Determined
Evaporation rate: (n-Butyl Acetate=1)	Approx. <1
Percent Volatile:	Not Determined
Boiling Point:	Not Determined
Vapor Density (Air = 1):	<1
Vapor pressure:	Not Determined
Solubility in Water:	Insoluble
Upper flammability limit:	Not Determined
Lower flammability limit:	Not Determined
Partition coefficient:	Not Determined
Autoignition temperature:	Not Determined
Decomposition temperature:	Not Determined

Other information

The above data are typical values and do not constitute a specification.

SECTION 10 - STABILITY AND REACTIVITY

Reactivity Not applicable

Chemical stability

Stability: Stable under normal conditions

Possibility of Hazardous Reactions

Possibility of Hazardous Reactions: None under normal processing
Hazardous polymerization: Hazardous polymerization does not occur

Conditions to avoid

Conditions to avoid: No special storage conditions required

Hazardous Decomposition Products

Hazardous Decomposition Products: None under normal processing

Incompatible materials

Incompatible materials: Oxidizing agents

SECTION 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	Contact with eyes may cause irritation. May cause mild, short-lasting discomfort to eyes based on assessment of the components.
Skin contact	Acute Toxicity: Minimally Toxic, based on assessment of the components. Substance does not generally irritate and is only mildly irritating to the skin with prolonged exposure.
Inhalation	Acute Toxicity: Minimally Toxic, based on assessment of the components. Irritation: Negligible hazard at ambient/normal handling temperatures.
Ingestion	Acute Toxicity: Minimally Toxic, based on assessment of the components and structurally similar materials.
Aspiration	Not expected to be an aspiration hazard, based on physical and chemical properties of the material.
Respiratory Sensitization	Not expected to be a respiratory sensitizer, based on assessment of the components and structurally similar materials.
Germ Cell Mutagenicity	Not expected to be a germ cell mutagen, based on assessment of the components and structurally similar materials.
Carcinogenicity	Not expected to cause cancer, based on assessment of the components and structurally similar materials. This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
Reproductive Toxicity	Not expected to be a reproductive toxicant, based on assessment of the components.
Lactation	Not expected to cause harm to breast-fed children.
Specific Target Organ Toxicity (STOT)	Single Exposure: Not expected to cause organ damage from a single exposure. Repeated Exposure: Not expected to cause organ damage from prolonged or repeated exposure.

OTHER INFORMATION

Product Information: Product does not present an acute toxicity hazard based on known or supplied information. Not expected to cause significant health effects under conditions of normal use, based on laboratory studies with the same or similar materials. Not mutagenic or genotoxic. Not sensitizing in test animals and humans.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: No known hazards to the aquatic r pot

Aquatic/Ecotoxicity: Based on previous studies, (OECD 201, 202, and 203) LC50/EC50 >3,000 ppm (3000 mg/L).

Bioaccumulation: No Potential to Bioconcentrate

Soil Mobility: Not Established

Persistence and degradability: Readily biodegradable >60% % after 28 days

Water Mobility: The product is insoluble and floats on water. **WGK:** 1

SECTION 13 - DISPOSAL INFORMATION

Waste treatment methods

Disposal of wastes: Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging: Do not reuse container.

SECTION 14 - TRANSPORTATION INFORMATION ,

UN number	ADR/RID Not regulated.
ICAO Not regulated.	IMDG Not regulated.
UN proper shipping name	ADR/RID Not regulated.
ICAO Not regulated.	IMDG Not regulated. Marine Pollutant: NO
Transport hazard class(es)	ADR/RID Not regulated.

