

# SAFETY DATA SHEET

Issue Date 15 May 2015

Revision date: 1 June 2016

Version 1.1

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

### Product identifier

**Product Name:** Bio-Penetrating Lubricant (BPL) (Food Grade)



### Other means of identification

**Product code:** 87002

**Synonyms:** None

Nonfood Compounds  
Program Listed (H1, H2)  
(Registration # 140450)

### Recommended use of the chemical and restrictions on use

**Recommended Use:** Food Grade H1, Biobased Penetrating Lubricant, (Biodegradable), Compliant with EPA, VGP, EAL

NSF Registered H1, H2 and is acceptable as a lubricant with incidental food contact (H1) for use in and around food processing areas.

### Details of the supplier of the safety data sheet

#### Supplier and Manufacture

#### **Renewable Lubricants, Inc.**

476 Griggy RD NE, P.O. Box 474

Hartville, Oh 44632

Phone: (330) 877-9982

Fax: (330) 877-2266

[www.renewablelube.com](http://www.renewablelube.com), [www.renewablelubricants.com](http://www.renewablelubricants.com)

### Emergency telephone number

**Emergency Telephone** (CHEMTREC) 1-800-424-9300. Outside the U.S. (703) 527-3887

## SECTION 2 Hazards Identification

### Classification

#### **OSHA Regulatory Status**

This meets 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Gases under pressure

Compressed Gas

### Label elements

#### EMERGENCY OVERVIEW

#### **Signal word**

**WARNING:**

#### **Hazard statements**

Contains gas under pressure; may explode if heated



**Appearance:** Transparent white as sprayed      **Physical state**      Aerosol      **Odor**      No Odor

**WARNING:** Contains gas under pressure; may explode if heated

**Storage and handling:** Protect from sunlight. Store in a well-ventilated area.

**Dispose of contents/container in accordance with local/regional regulations.**

**Hazards not otherwise classified (HNOC)**

#### **Other information**

### SECTION 3 –COMPOSITION/INFORMATION on INGREDIENTS

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

| Components     | CAS-No   | Weight % | Trade Secret |
|----------------|----------|----------|--------------|
| Carbon Dioxide | 124-38-9 | 1-10%    |              |
| Oil Mist       | N/A      | 90-99%   |              |

### 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. Risk of product entering the lungs on vomiting after ingestion. If conscious, drink plenty of water. Obtain medical attention.

#### 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.

### SECTION 5 – FIRE-FIGHTING MEASURES

#### Suitable extinguishing media:

Use dry chemical, CO<sub>2</sub>, water spray or “alcohol” foam.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire

#### Specific hazards arising from the chemical

In the event of fire, cool tanks with water spray.

#### Explosion data

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

#### Special protective equipment for firefighters:

In the event of fire, wear self-contained breathing apparatus.

### SECTION 6 –ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Use personal protective equipment.

#### Environmental precautions

**Environmental precautions:** Prevent product from entering drains. Do not contaminate surface water.

#### 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:** Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste

### SECTION 7 –HANDLING AND STORAGE

#### Precautions for safe handling

**Handling** Keep away from heat, sparks, open flames, hot surfaces etc. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: do not pierce or burn.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a cool, well-ventilated place

**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           |      |
| Carbon Dioxide | 9,000 (TWA) mg/m3 10h | 9,000 mg/m3 8h     |      |

**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**

|   |  |
|---|--|
| <b>Physical state</b>                         | Aerosol                                      |
| <b>Appearance</b>                             | Oil stream to mist as sprayed                |
| <b>Odor</b>                                   | Mild   |
| <b>Color</b>                                  | Transparent white                            |
| <b>Odor threshold</b>                         | No odor                                      |
| <b>Specific Gravity (H<sub>2</sub>O = 1):</b> | .88 @ 15.6°C                                 |
| <b>Flash Point (PMCC):</b>                    | 146°C (295°F)                                |
| <b>Kinematic viscosity:</b>                   | 13 cSt @ 40°C                                |
| <b>Pour Point:</b>                            | -30°C (-22°F)                                |
| <b>Explosive properties:</b>                  | Material does not have explosive properties. |
| <b>Oxidizing properties:</b>                  | See Section 2, No significant hazards.       |
| <b>Volatile Organic Compound (VOC):</b>       | Components contain No VOC according to CARB  |
| <b>Melting: point/freezing point:</b>         | Not Determined                               |
| <b>Boiling point /boiling range:</b>          | Not Determined                               |
| <b>Flammability (solid, gas):</b>             | Not Determined                               |
| <b>Flammability Limit in Air</b>              | Not Determined                               |
| <b>Evaporation rate: (n-Butyl Acetate=1)</b>  | Approx. <1                                   |
| <b>Percent Volatile:</b>                      | Not Determined                               |
| <b>Boiling Point:</b>                         | Not Determined                               |
| <b>Vapor Density (Air = 1):</b>               | <1   |
| <b>Vapor pressure:</b>                        | Not Determined                               |
| <b>Solubility in Water:</b>                   | Insoluble                                    |
| <b>Upper flammability limit:</b>              | Not Determined                               |
| <b>Lower flammability limit:</b>              | Not Determined                               |
| <b>Partition coefficient:</b>                 | Not Determined                               |
| <b>Autoignition temperature:</b>              | Not Determined                               |
| <b>Decomposition temperature:</b>             | Not Determined                               |
| <b>Other information</b>                      |  |
| <b>Softening point</b>                        | No information available                     |
| <b>Molecular weight</b>                       | No information available                     |
| <b>Bulk density</b>                           | No information available                     |

**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** Do not store at temperatures above 120°F

**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.  
**Skin contact** Substance does not generally irritate and is only mildly irritating to the skin.  
**Inhalation** Avoid breathing vapors or mists.  
**Ingestion** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.  
Potential for aspiration if swallowed.  
Aspiration may cause pulmonary edema and pneumonitis.

| Components | Oral LD50- | Dermal LD50 | Inhalation LC50 |
|------------|------------|-------------|-----------------|
|------------|------------|-------------|-----------------|

**Information on toxicological effects**

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

**Sensitization** No sensitization responses were observed.  
**Mutagenic effects:** Did not show mutagenic or teratogenic effects in animal experiments.  
**Carcinogenicity** This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.  
**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** May be fatal if swallowed and enters airways.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

**ATEmix (oral)** 16516 mg/kg  
**ATEmix (dermal)** 6607 mg/kg

**SECTION 12 – ECOLOGICAL INFORMATION**

**Ecotoxicity:** No known hazards to the aquatic environment

**Biodegradation:** Based on previous biodegradability studies, the products provide Ultimate Biodegradation Pw1 >60% within 28 days in ASTM D-5864 Aerobic Aquatic Biodegradation of Lubricants.

**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

Aerosols (limited quantity),  
Class 2.2, ERG 126, UN 1950

Air (IATA)  
Aerosols (limited quantity),  
Class 2.2, ERG 126, UN 1950

Vessel  
Aerosol (limited quantity), Class 2.2, UN  
1950

## SECTION 15 –REGULATORY INFORMATION

### **International Inventories**

**TSCA:** Listed in TSCA

**TSCA -** United States Toxic Substances Control Act Section 8(b) Inventory

### **Global Chemical Inventories:**

**USA** All components of this material are on the US TSCA Inventory or are exempt.

**EU** All components are in compliance with the EC Seventh amendment Directive 92 /32/EEC.

**Japan** All components are in compliance with the Chemical Substances Control Law of Japan.

**Australia** All components are in compliance with chemical notification requirements in Australia.

**Canada** All components are in compliance with the Canadian Environmental Protection Act and are Canadian DSL/NDSL.

**Switzerland** All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.

**China** All components of this product are listed on the Inventory of Existing Chemical Substances in China

**Korea** All components are in compliance in Korea.

**Philippines** All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).

**TSCA:** All ingredients in this product are listed or exempt from listing on the TSCA Chemical inventory.

**CEPA:** All ingredients in this product are listed or exempt from listing on the Canadian DSL/NDSL.

**Proposition 65:** This product contains no chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

### Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### SARA 311/312 Hazard Categories

|                                   |     |
|-----------------------------------|-----|
| Acute Health Hazard               | Yes |
| Chronic Health Hazard             | No  |
| Fire Hazard                       | No  |
| Sudden release of pressure hazard | Yes |
| 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:**

|                   |               |               |               |
|-------------------|---------------|---------------|---------------|
| <b>Components</b> | <b>NJRTK:</b> | <b>MARTK:</b> | <b>PARTK:</b> |
|-------------------|---------------|---------------|---------------|

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**SECTION 16 –OTHER INFORMATION**

Read and follow all label directions and precautions before using the product.

**Nfpa:**

Health: 1

Flammability: 1

Instability 0

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

**HMIS health rating:**

Health: 1

Flammability: 1

Physical hazards 0

Personal protection B

**Revision:**

| <b>Date</b>     | <b>Revised Section</b>        |
|-----------------|-------------------------------|
| 27 January 2015 | new                           |
| 1 June 2016     | Section 9, Flash Point (PMCC) |
|                 |                               |

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