

SAFETY DATA SHEET

Issue Date: 15 May 2015

Revision date: 22 May 2019

Version 1

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

Product identifier

Product Name: Bio-E.P. Graphite Grease NLGI #1

Other means of identification

Product code: 87684, 87685, 87686

CAS NO: Mixture

Synonyms: None

Recommended use of the chemical and restrictions on use

Recommended Use: Biobased Grease Oil, (Biodegradable), Compliant with EPA-VGP-EAL

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, 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 chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label Elements

Emergency Overview

Appearance Opaque Black

Physical State Grease

Odor Characteristic

Hazards not otherwise classified (HNOC)

None known

Other Information

None known.

Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

SECTION 3 - COMPOSITION/INFORMATION on INGREDIENTS

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

General advice:	Show this safety data sheet to the doctor in attendance. Remove contaminated clothing and shoes. Wash contaminated clothing before re-use. Wash off with soap and water. If symptoms persist, call a physician
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Skin contact:	Remove and wash contaminated clothing before re-use. Wash off immediately with soap and plenty of water. If a person feels unwell or symptoms of skin irritation appear, consult a physician.
Ingestion:	If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person
Inhalation:	Move to fresh air in case of accidental inhalation of vapors. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.
Note to physician:	Treat symptomatically.
Medical condition aggravated by exposure:	Dermatitis.

SECTION 5 - FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Use dry chemical, CO ₂ , water spray or `alcohol` foam. Do not use water with full jet.
Specific hazards:	Do not allow material to contaminate ground water system.
Special protective equipment for fire-fighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear
Specific methods:	Water mist may be used to cool closed containers

SECTION 6 - ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

PROTECTIVE MEASURES

Avoid contact with spilled material. See Section 5 for firefighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

SPILL MANAGEMENT

Land Spill: Scrape up spilled material with shovels into a suitable container for recycle or disposal.

Water Spill: Stop leak if you can do it without risk. Confine the spill immediately with booms. Warn other shipping. Skim from surface.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

ENVIRONMENTAL PRECAUTIONS

Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7 - HANDLING AND STORAGE**HANDLING** Prevent small spills and leakage to avoid slip hazard.**Static Accumulator** This material is not a static accumulator.**STORAGE:** Do not store in open or unlabeled containers. Do not store outside and use general maintenance practice.**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**

Chemical Name	ACGIH Exposure Limits	OSHA TWA (final)	NIOSH - Pocket Guide
Graphite	2 mg/m ³ (TWA)	15 mg/m ³ 5 mg/m ³	2.5 mg/m ³ (TWA)
Calcium carbonate (limestone)	None	15 mg/m ³	10 mg/m ³ (TWA) 5 mg/m ³ (TWA)

Engineering measures: Ensure adequate ventilation**Personal Protective Equipment:****General:** Provide easy access to eyewash/safety shower facilities.**Respiratory protection:** If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, respiratory protection may be required. Contact your site safety representative for proper respirator selection.**Eye protection:** Wear safety glasses with side shields (or goggles)**Hand protection:** Wear chemical-resistant gloves as appropriate for the risk of exposure. Contact your safety department for specific recommendations**Skin and body protection:** Wear protective clothing and appropriate footwear necessary for the risk of exposure. Contact your health and safety department for specific recommendations**Hygiene measures:** Handle in accordance with sound chemical hygiene practices. Wear the appropriate PPE. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Do not eat, drink, or smoke while using chemicals.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Grease
Appearance	Opaque Black
Odor	Characteristic
Odor Threshold	No information available
pH concentrate:	No information available
pH Dilution	No information available
Melting/freezing point	No information available
Boiling Point/Range	No information available
Flash Point	326 °C / 610 °F
Method	Cleveland Open Cup (COC)
Evaporation rate	No information available
Flammability Limits in Air	
upper flammability limit	No information available
lower flammability limit	No information available
VOC Content Product (lb/gal)	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific Gravity (g/cc, 15 C)	0.936
Bulk Density (lb/gal, 15 C)	7.81
Water Solubility	Insoluble
Solubility in other solvents	No information available
Partition coefficient: n-octanol/water	No information available
Autoignition temperature	No information available
Decomposition Temperature	No information available
Kinematic viscosity	42 mm ² /s @ 40 C

Dynamic viscosity

No information available

Molecular Weight

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:	No special storage conditions required
Hazardous Decomposition Products	
Hazardous Decomposition Products:	None under normal processing
Incompatible materials	
Incompatible materials:	NA

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

1.58501% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and Degradability No information available.

Bioaccumulation No information available.

Mobility: No data available

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Ozone: No data available

SECTION 13 - DISPOSAL INFORMATION

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

REGULATORY DISPOSAL INFORMATION

RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

Waste treatment methods

Disposal of waste: 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.
ICAO Not regulated.	IMDG Not regulated.
Packing group	ADR/RID Not regulated.
AIR	IATA Not regulated.
LAND	TDG Not regulated.
LAND	DOT Not regulated.

SECTION 15 - REGULATORY INFORMATION

Federal Regulations

OSHA Hazard Communication Standard: This product is considered non-hazardous under the OSHA Hazard Communication Standard.

CERCLA/SARA Information:

SARA (311, 312) hazard class: This product possesses the following SARA Hazard Categories:

Immediate Health (Acute):	Yes
Delayed Health (Chronic):	No
Flammability:	No
Pressure:	No
Reactivity:	No

Clean Air and Clean Water Acts:

U.S. STATE REGULATIONS

(RTK):

California Proposition 65 Status: May contain trace amounts of listed chemicals: silica

CANADIAN REGULATIONS:

INVENTORY STATUS:

United States TSCA Inventory: This product complies with TSCA

Canada DSL/NDSL Inventory List This product complies with DSL

SECTION 16 - OTHER INFORMATION

Sources of key data used to compile the data sheet: Material safety data sheets of the ingredients.

Prepared by: Safety, Health and Environmental Department

Revision Date: 05/22/2019

Reason for revision: Updated storage information.

Personal protection recommendations should be reviewed by purchasers. Workplace conditions are important factors in specifying adequate protection.

Disclaimer

This product's safety information is provided to assist our customers in assessing compliance with safety/health/environmental regulations. The information contained herein is based on data available to us and is believed to be accurate. However, no warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of this data, the results to be obtained from the use thereof, or the hazards connected with the use of the product. Since the use of this product is within the exclusive control of the user, it is the user's obligation to determine the conditions for safe use of the product. Such conditions should comply with all regulations concerning the product. The company referenced in this Safety Data Sheet assumes no liability for any injury or damage, direct or consequential, resulting from the use of this product unless such injury or damage is attributable to the gross negligence of such company.

End of Safety Data Sheet