SAFETY DATA SHEET.

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Version 1

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

| <u>Product identifier</u> Product name | BIODEGRADABLE PENETRATING LUBE |
|---|---|
| Recommended use of the chemical and restrictions on use | |
| Product code | F01875 |
| Synonyms | None |
| Supplier's details | |
| Recommended Use Uses advised against | Biodiogradable Penetrating Lubricant. No information available |
| Manufactured For: Bioblend Renewable Resources, LLC 2439 Reeves Road Joliet, IL 60436 | |
| Emergency telephone number Chemical Emergency Phone Number Company Emergency Phone Number | U.S. 1-866-836-8855 / OUTSIDE U.S. 1-952-4646 630-227-1800 |

2. HAZARDS IDENTIFICATION

Classification

| Serious eye damage/eye irritation | Category 2 |
|--|----------------|
| Specific target organ toxicity (single exposure) | Category 3 |
| Flammable aerosols | Category 1 |
| Gases under pressure | Compressed Gas |

GHS Label elements, including precautionary statements

Emergency Overview

| Emergency Overview | | | |
|--------------------------------------|------------------------|------------|-----|
| DANGER | | | |
| Hazard Statements | | | |
| Causes serious eye irritation | | | |
| May cause drowsiness or dizziness | | | |
| Extremely flammable aerosol | | | |
| Contains gas under pressure; may exp | olode if heated | | |
| | | | |
| Appearance opaque | Physical state Aerosol | Odor Solve | ent |

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear eye/face protection Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Keep away from heat/sparks/open flames/hot surfaces. - No smoking Do not spray on an open flame or other ignition source Pressurized container: Do not pierce or burn, even after use

Precautionary Statements - Response

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 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell

Precautionary Statements - Storage

Store locked up Store in a well-ventilated place. Keep container tightly closed Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None

Other information

· Toxic to aquatic life with long lasting effects

0.000005% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | Weight %* |
|-------------------|----------|-----------|
| ISOPROPYL ALCOHOL | 67-63-0 | 30-40 |
| CARBON DIOXIDE | 124-38-9 | 1-10 |

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

4. FIRST AID MEASURES

| First aid measures for different exposure routes | | |
|--|--|--|
| General advice | Avoid contact with eyes, skin, and clothing. Avoid breathing, vapors, mist, or gas. | |
| Eye contact | In the case of contact with eyes, rinse immediately with plenty of water for 15 minutes and seek medical advice. | |
| Skin contact | Wash off immediately with plenty of water. Remove and wash contaminated clothing before re-use. Get medical attention immediately if symptoms occur. | |
| Inhalation | Move to fresh air. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately. | |
| Ingestion | Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion. | |
| Most important symptoms/effects, acute and delayed | | |
| Main Symptoms | Causes eye irritation. May cause drowsiness or dizziness. | |
| Indication of immediate medical attention and special treatment needed, if necessary | | |
| Notes to physician | Treat symptomatically. | |
| | | |

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

water fog. Dry chemical. Carbon dioxide (CO2). Cool containers / tanks with water spray.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Flammable or extremely flammable aerosol. Container may burst in fire.

Explosion Data Sensitivity to Mechanical Impact none. Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use shielding to protect fire-fighters from bursting containers.

| 6. ACCIDENTAL RELEASE MEASURES | | | |
|---|--|--|--|
| Personal precautions, protective equipment and emergency procedures | | | |
| Personal precautions | Use with adequate ventiliation to keep the exposure levels below the OELS. | | |
| Environmental precautions | | | |
| Environmental precautions | Report spills as required by local and federal regulations. | | |
| Methods and materials for contain | nment and cleaning up | | |
| Methods for Containment | Prevent further leakage or spillage if safe to do so. | | |
| Methods for cleaning up | ng up Contain liquid and collect with an inter, non-combustible material. | | |
| | 7. HANDLING AND STORAGE | | |
| Precautions for safe handling | | | |
| Advice on safe handling | Avoid contact with eyes. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can. Avoid contact with skin and eyes. Avoid breathing vapors or mist. Do not puncture or incinerate container. Use with adequate ventilation. Keep container away from heat, flames, and all other sources of ignition. Store in a cool place. | | |
| Conditions for safe storage, including any incompatibilities | | | |
| Technical measures/Storage conditions | Keep containers tightly closed in a dry, cool and well-ventilated place. | | |
| Incompatible products | Store away from strong oxidizers and acids. | | |
| Aerosol Level | 3 | | |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-------------------|-----------------|---|-------------------------------|
| ISOPROPYL ALCOHOL | STEL: 400 ppm | TWA: 400 ppm | IDLH: 2000 ppm |
| 67-63-0 | TWA: 200 ppm | TWA: 980 mg/m ³ | TWA: 400 ppm |
| | | (vacated) TWA: 400 ppm | TWA: 980 mg/m ³ |
| | | (vacated) TWA: 980 mg/m ³ | STEL: 500 ppm |
| | | (vacated) STEL: 500 ppm | STEL: 1225 mg/m ³ |
| | | (vacated) STEL: 1225 mg/m ³ | |
| CARBON DIOXIDE | STEL: 30000 ppm | TWA: 5000 ppm | IDLH: 40000 ppm |
| 124-38-9 | TWA: 5000 ppm | TWA: 9000 mg/m ³ | TWA: 5000 ppm |
| | | (vacated) TWA: 10000 ppm | TWA: 9000 mg/m ³ |
| | | (vacated) TWA: 18000 mg/m ³ | STEL: 30000 ppm |
| | | (vacated) STEL: 30000 ppm | STEL: 54000 mg/m ³ |
| | | (vacated) STEL: 54000 mg/m ³ | _ |

ACGIH: (American Conference of Governmental Industrial Hygienists) OSHA: (Occupational Safety & Health Administration) NIOSH IDLH: Immediately Dangerous to Life or Health

.

| Other Exposure Guidelines | Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992). |
|---------------------------|---|
| Exposure controls | |
| Engineering Measures | Ventilation systems. Use adequate ventilation to keep the exposure levels below the OELs. |

Individual protection measures, such as personal protective equipment

| Eye/Face Protection | Safety glasses with side-shields. | |
|--------------------------|---|--|
| Skin and body protection | Chemical resistant apron. Protective gloves. | |
| Respiratory protection | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. | |
| Hygiene measures | Handle in accordance with good industrial hygiene and safety practice. | |

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

| Physical state Appearance Color | Aerosol opaque Light Amber | Odor Odor Threshold | Solvent No information available | |
|---|--|---|-------------------------------------|--|
| <u>Property</u> pH Melting/freezing point | <u>Values</u> No information available No information available | Remarks • Methods | | |
| Boiling point/boiling range Flash Point | No information available 12 °C / 54 °F | Based on lowest flashpo constituent. | pint of the products | |
| Evaporation rate Flammability (solid, gas) Flammability Limits in Air | No information available No information available | | | |
| upper flammability limit lower flammability limit Vapor pressure | No information available No information available No information available | | | |
| Vapor density Specific Gravity Water solubility | No information available 0.928 Practically insoluble | | | |
| Partition coefficient: n-octanol/wate Autoignition temperature | erNo information available No information available | | | |
| Decomposition temperature Viscosity | No information available No information available | | | |
| Explosive properties Other information | No information available | | | |
| VOC Content(%) | 33.68 | | | |
| | | | | |

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

Store away from strong oxidizers and acids.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| Product Information | Product does not present an acute toxicity hazard based on known information |
|---------------------|--|
| Inhalation | Inhalation of vapors in high concentration may cause irritation of respiratory system. |
| Eye contact | Irritating to eyes. |
| Skin contact | May cause skin irritation. |
| Ingestion | May be harmful if swallowed. |

Component Information

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-------------------|--------------------|-----------------------|-------------------------------------|
| ISOPROPYL ALCOHOL | = 1870 mg/kg (Rat) | = 4059 mg/kg (Rabbit) | = 72600 mg/m ³ (Rat) 4 h |
| 67-63-0 | | | |

Information on toxicological effects

Symptoms

Symptoms of everexposure may be headache, dizziness, tiredness, nausea, and vomiting. May cause respiratory irritation. May cause skin and eye irritation. Aspiration into the lungs during swallowing may be harmful and cause lung damage.

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

| Skin corrosion/irritation Eye damage/irritation | May cause mild irritation to skin. Irritating to eves. |
|--|--|
| Sensitization | No information available. |
| Germ Cell Mutagenicity | No information available. |
| Carcinogenicity | There are no known carcinogenic chemicals in this product. |
| Reproductive toxicity | No information available. |
| Specific target organ systemic | may cause drowsiness and dizziness. |
| toxicity (single exposure) | |
| Specific target organ systemic | No information available. |
| toxicity (repeated exposure) | |
| Chronic toxicity | Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest. Prolonged skin contact may defat the skin and produce dermatitis. |
| Target Organ Effects | Central Vascular System (CVS), Eyes, Respiratory system, Skin, Central nervous system, Peripheral Nervous System (PNS). |
| Aspiration hazard | No information available. |
| Numerical measures of toxicity - F | Product Information |

| Unknown Acute Toxicity | 0.000005% 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) | 18597 mg/kg |
| ATEmix (dermal) | 9949 mg/kg |
| ATEmix (inhalation-dust/mist) | 72.4 mg/l |
| ATEmix (inhalation-vapor) | 195918 mg/l |

12. ECOLOGICAL INFORMATION

Ecotoxicity

| Chemical Name | Toxicity to algae | Toxicity to fish | Toxicity to microorganisms | Toxicity to daphnia and other aquatic invertebrates |
|-------------------|---|---|-------------------------------|--|
| ISOPROPYL ALCOHOL | 1000 mg/L EC50 | 11130 mg/L LC50 | - | 13299 mg/L EC50 Daphnia |
| 67-63-0 | Desmodesmus subspicatus 96h 1000 mg/L EC50 Desmodesmus subspicatus 72h | Pimephales promelas 96h static 9640 mg/L LC50 Pimephales promelas 96h flow-through 1400000 µg/L LC50 Lepomis macrochirus 96h | | magna 48h |

Persistence and degradability

No information available.

Bioaccumulation

No information available.

| Chemical Name | log Pow |
|-------------------|---------|
| ISOPROPYL ALCOHOL | 0.05 |
| 67-63-0 | |

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods Dispose of in accordance with federal, state, and local regulations.

Contaminated packaging Do not re-use empty containers.

14. TRANSPORT INFORMATION

| DOT Ground | CONSUMER COMMODITY ORM-D |
|------------|--------------------------|
| | or |
| | LIMITED QUANTITY |

| ΙΑΤΑ | UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD. QTY. |
|------|---|
| IMDG | UN1950, AEROSOLS, 2.1, LTD. QTY. |

15. REGULATORY INFORMATION

International Inventories

| Chemical Name | TSCA | DSL/NDSL | EINECS/ELI NCS | ENCS | IECSC | KECL | PICCS | AICS |
|----------------------|------|----------|-------------------|------|-------|------|-------|------|
| ISOPROPYL ALCOHOL | Х | X | Х | Х | Х | Х | Х | Х |
| CARBON DIOXIDE | Х | Х | Х | Х | Х | Х | Х | Х |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

F01875 - BIODEGRADABLE PENETRATING LUBE

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - 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

U.S. 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 | CAS-No | Weight %* | SARA 313 - Threshold Values % |
|-----------------------------------|---------|-----------|----------------------------------|
| ISOPROPYL ALCOHOL - 67-63-0 | 67-63-0 | 30-40 | 1.0 |
| SARA 311/312 Hazard Categories | | | |
| Acute Health Hazard | Yes | | |
| Chronic Health Hazard | no | | |
| Fire Hazard | Yes | | |
| Sudden Release of Pressure Hazard | Yes | | |
| Reactive Hazard | no | | |

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.

U.S. State Regulations

California Proposition 65

This product does not contain any known Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|------------------------------|------------|---------------|--------------|
| ISOPROPYL ALCOHOL 67-63-0 | Х | X | Х |
| CARBON DIOXIDE 124-38-9 | Х | X | Х |

EPA Pesticide Registration Number Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

16. OTHER INFORMATION

F01875 - BIODEGRADABLE PENETRATING LUBE

| NFPA | Health Hazard 2 | Flammability 4 | Instability 0 | Physical and chemical hazards - |
|--------------------------|-----------------|----------------|-------------------|------------------------------------|
| HMIS | Health Hazard 2 | Flammability 4 | Physical Hazard 1 | Personal protection B |
| Prepared By | Regulato | ory Affairs | | |
| Issuing date | 14-Jul-20 | 015 | | |
| Revision Date | 14-Jul-20 | 015 | | |
| Revision Note | | | | |
| No information available | | | | |

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet