



SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

Company Information:

BioBlend Renewable Resources, LLC
1500 Jarvis Ave.
Elk Grove Village, IL 60007
(630) 227-1800
www.bioblend.com

Emergency Contact Information:

(630) 227-1800
8 AM - 4 PM, Monday through
Friday

| | |
|---------------------|---------------------------------------------------------|
| Product Name | BioFlo Epic TO-4 SAE 50 |
| Product Description | Biodegradable TO-4 |
| Product Use | Product is intended for use as an industrial lubricant. |

SECTION 2: HAZARD(S) IDENTIFICATION

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| Hazard Statement | This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard, which has been updated to align with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). |
| Precautionary Statements | Oil soaked materials (rags, steel wool, clothing, etc.) should be placed in a sealed metal container to prevent spontaneous combustion (fire). The product contains no substances at their given concentration, that are considered hazardous to one's health. |
| Hazard Classification | Not Applicable |
| Hazards not otherwise classified | None known |
| Unknown Toxicity Statement | <1% of the mixture consists of ingredients with unknown toxicity |

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS No. | Weight |
|-----------------------|---------|--------|
| Synthetic Esters | MIXTURE | 80-90% |
| Performance Package | MIXTURE | 7-10% |
| Pour Point Depressant | MIXTURE | 1-3% |

The exact percentage (concentration) of composition has been withheld as a trade secret. If CAS number is indicated as "PROPRIETARY" or "MIXTURE", information has been withheld as a trade secret.

SECTION 4: FIRST AID MEASURES

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|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| First Aid - Inhalation | Move to fresh air and seek medical advice/attention if irritation develops. |
| First Aid - Eye Contact | Thoroughly rinse eyes and under eyelids with plenty of water. Seek medical advice/attention if irritation develops. |
| First Aid - Skin Contact | Wash effected area immediately with warm water and soap. Seek medical advice/attention if irritation develops. |
| First Aid - Ingestion | No special measures required. Health injuries are not known or expected under normal use. |
| Recommendations for immediate medical care/special treatment | Physicians should treat symptomatically. |

SECTION 5: FIREFIGHTING MEASURES

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| Suitable extinguishing media | Dry media, dry chemical powder, carbon dioxide (CO ₂), foam, sand, fog. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media | For safety reasons, do not use a solid water stream as it may scatter and spread fire. |
| Specific hazards that may develop | Risk of ignition. Rags and other materials containing this product may heat and spontaneously ignite if exposed to air. Store wiping rags and other materials in metal cans with tight fitting lids. Cool closed containers exposed to fire with water spray. |

Special firefighting equipment/precautions

Firefighters should use all standard protective equipment to fight fire. Empty containers contain residue and/or vapors; do not weld, cut, pressurize, braze, solder, drill, grind or expose to heat, spark or flame.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid high pressure washing or generation of aerosols. Material can create slippery conditions.

Emergency procedures

In the event of a spill, evacuate non-essential personnel, remove any sources of ignition, ventilate spill area, and prevent entry into sewers and waterways. Pick up free material for recycle or disposal and absorb residual liquid with inert material.

Methods and material for containment

Prevent further leakage or spillage if safe to do so. Soak up with inert absorbent material and remove any ignition sources. Use only non-sparking tools and ensure adequate ventilation. Notify the proper authorities.

Cleanup procedures

Dam up, then soak up with absorbent material. Use a dry spill kit or sand, and collect in appropriate containers before disposing according to all proper regulations. Clean contaminated surfaces thoroughly.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Ensure adequate ventilation to prevent inhalation of vapor/dust. Do not use pressure to empty drums. Keep away from open flames, hot surfaces and sources of ignition. Handle in accordance with good industrial hygiene and safety practices.

Storage recommendations

Store in a cool, sheltered location. To maintain product quality, do not store in heat or direct sunlight.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

| Chemical Name | ACGIH TLV | OSHA PEL | Mexico | NIOSH |
|--------------------|----------------|------------------------------------------|--------------------------------------|--------------------------------|
| Vegetable Oil Mist | TVL: 10mg/m(3) | TWA: 5 mg/m(3) mist, respirable fraction | TWA: 10 mg/m(3) except irritant oils | TWA: 10 mg/m(3) total mist |
| Synthetic Esters | | TWA: 15 mg/m(3) mist, total | | TWA: 5 mg/m(3) respirable mist |

Engineering controls

Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with the occupational exposure limits.

Recommended Personal Protective Equipment:

Eye/Face Protection

If exposure to airborne mist or splashing is possible, safety goggles or safety glasses with side shields are recommended.

Respiratory Protection

In case of mist, spray or aerosol exposure, wear suitable personal respiratory protection.

Skin/Body Protection Oil resistant gloves are recommended. Appropriate body protection should be selected based on activity and possible exposure. Specific local conditions under which the product is used should also be taken into consideration.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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|------------------------------------------|-----------------------------------------|
| Appearance | Amber liquid |
| Odor | Mild odor Not |
| Odor Threshold | Not Applicable |
| pH | Not Applicable |
| Melting Point/ Freezing Point | -30_o C Freezing |
| Initial Boiling Point/ Range | Not available |
| Flash Point | >450° F (260° C) |
| Fire Point | |
| Evaporation rate | Not available |
| Flammability | Not available |
| Flammability, upper limits | Not available |
| Flammability, lower limits | Not available |
| Vapor pressure | Not available |
| Vapor density | Not available |
| Relative density | Not available |
| Solubility(ies) | Soluble in many organic solvents |
| Solubility in water | Negligible |
| Partition coefficient: | Not available |

n-octanol/water

Auto-ignition temperature Not available

Decomposition temperature Not available

Viscosity @ 40C, cSt 192.6

SECTION 10: STABILITY AND REACTIVITY

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|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Reactivity | This product is stable and non-reactive under normal conditions of use, storage, handling and transportation. |
| Stability | This product is chemically stable under normal conditions of use, storage, handling and transportation. |
| Possibility of hazardous reactions | Hazardous polymerization does not occur. |
| Conditions to avoid | Avoid contact with incompatible materials and keep product away from open flames, hot surfaces, and sources of ignition. |
| Incompatible materials | No materials to be especially mentioned. |
| Hazardous decomposition products | Thermal decomposition leads to formation of acrolein, Carbon monoxide (CO), Carbon dioxide (CO ₂), smoke, and fumes. |

SECTION 11: TOXICOLOGICAL INFORMATION

Potential health effects:

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| Inhalation | Health injuries are not known or expected under normal use. When in the form of an airborne mist, refer to section 8 for exposure limits pertaining to "synthetic esters". Excessive inhalation of mist may result in respiratory irritation. |
| Eye contact | Not expected to to pose health issues for the eye. |
| Skin contact | Prolonged or excessive contact with skin may result in mild irritation, however, significant health injuries are not expected under normal use. |

Ingestion Health injuries are not known or expected under normal use.
Overexposure may cause gastrointestinal disturbance.

Symptoms or effects, including acute and delayed:

Inhalation None known or expected under normal use.

Eye Contact None known or expected under normal use.

Skin Contact None known or expected under normal use.

Ingestion None known or expected under normal use.

Toxicological effects:

| | |
|-----------------------------------|-------------------------------------------------------------------------------|
| Acute Toxicity | Based on available data, no evidence of acute toxicity. |
| Skin corrosion/irritation | Based on available data, not, or only slightly irritating. |
| Serious eye damage/irritation | Based on available data, no evidence of serious eye damage/irritation |
| Respiratory or skin sensitization | Based on available data, not expected to be a respiratory or skin sensitizer. |
| Germ cell mutagenicity | Based on available data, the classification criteria are not met. |
| Carcinogenicity | Based on available data, no evidence of carcinogenicity. |
| Reproductive toxicity | Based on available data, no evidence of reproductive toxicity. |
| STOT - single exposure | Based on available data, the classification criteria are not met. |
| STOT - repeated exposure | Based on available data, the classification criteria are not met. |
| Aspiration hazard | Based on available data, no known aspiration hazard. |

NTP Report on Carcinogens This product is not considered to be a carcinogen by NTP.

IARC listing of potential carcinogens This product is not considered to be a carcinogen by IARC.

OSHA listing of potential carcinogens This product is not considered to be a carcinogen by OSHA.

SECTION 12: ECOLOGICAL INFORMATION

OECD 301B Biodegradability >60%

Bioaccumulation **Non-bioaccumulative per US EPA definition**

OECD 201
Alga, EC50, 72hr, mg/L **>13,000**

OECD 202
Daphnia, EC50, 48hr,
mg/L **>15,000**

OECD 203
Fish, LC50, 96hr, mg/L **>28,000**

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal considerations **Dispose of contents/container in accordance with all local, regional, state, national and international regulations.**

Waste from residues/unused products **Dispose of in accordance with all local, regional, state, national and international regulations.**
Oil soaked materials may spontaneously combust and should be properly managed to avoid ignition and heat sources or oxygen rich environments. Collect and store soaked materials in closed metal containers to help prevent combustion.

Contaminated packaging **Empty containers may contain residue and should not be reused. They should be decontaminated and taken for local recycling, recovery or waste disposal.**

SECTION 14: TRANSPORT INFORMATION

US DOT **Not regulated by the US DOT as a hazardous material**

TDG (Canada) **Not regulated by the Canadian TDG as a hazardous material**

ICAO **Not regulated**

IMDG **Not regulated**

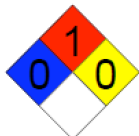
IATA **Not regulated**

SECTION 15: REGULATORY INFORMATION

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|-------------------------------------|------------------------------------------------------------------|
| US TSCA Inventory | All components of this product are listed on the TSCA Inventory. |
| California Prop. 65 | Not listed |
| SARA Extremely Hazardous Substances | Not listed as such |
| SARA Section 313 | Does not contain any 313 ingredients |
| CERCLA Hazardous Substances | No reportable quantity for this product or its components |

SECTION 16: OTHER INFORMATION

Revision date 6_28_2018



This product's safety information is provided to assist our customers in assessing compliance with safety, health and environmental regulations. The information contained within this document is based on data available to us and is believed to be accurate at the time of last revision. However, no warranty of 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 this product. Whereas 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 this product. Such conditions must comply with with all regulations concerning this product. BioBlend Renewable Resources, LLC 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 gross negligence on the part of BioBlend Renewable Resources, LLC.