

**SECTION 1: IDENTIFICATION**

***Company Information:***

BioBlend Renewable Resources, LLC  
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(630) 227-1800  
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***Emergency Contact Information:***

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

Product Name	BioFlo FS 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**

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

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

Suitable extinguishing media	Dry media, dry chemical powder, carbon dioxide (CO <sub>2</sub> ), 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

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

n-octanol/water

Auto-ignition temperature Not available

Decomposition temperature Not available

Viscosity @ 40C, cSt 192.6

## SECTION 10: STABILITY AND REACTIVITY

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 <sub>2</sub> ), smoke, and fumes.

## SECTION 11: TOXICOLOGICAL INFORMATION

### *Potential health effects:*

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.



**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**

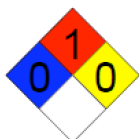
**IATA**                      **Not regulated**

## SECTION 15: REGULATORY INFORMATION

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 2/2/2024



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.