

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 46
Product Description	High-Performance Bio-Based Hydraulic Fluid

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 %	
Canola, oleicacid - high	228404-57-7	85-95%	
Performance Package	MIXTURE	2-10%	
Other Components	PROPRIETARY	<5%	

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 (CO2), foam, sand, fog. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguish- ing 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.

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 recommen- dations	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 Contains no exposure limits
- 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

Appearance	Amber liquid
Odor	Mild odor
Odor Threshold	Not applicable
рН	Not applicable
Melting Point/ Freezing Point	Not available
Initial Boiling Point/ Range	Not available
Flash Point	>600°F
Fire Point	>650°F
Evaporation rate	Not available
Flammability	Not applicable
Flammability, upper limits	Not applicable
Flammability, lower limits	Not applicable
Vapor pressure	Not applicable
Vapor density	Not applicable
Relative density	.91
Solubility(ies)	Soluble in many organic solvents
Solubility in water	Negligible
Partition coefficient: n-octanol/water	Not available

Auto-ignition tempera- ture	Not auto-flammable
Decomposition temp- erature	Not available
Viscosity @ 40C, cSt	46

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 hazard- ous 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 mater- ials	No materials to be especially mentioned
Hazardous decomp- osition 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:	
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. 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

>90%

Bioaccumulation Not available

OECD 201	>40,000
Algae, EC50, 96hr,	
mg/L	

OECD 202 >19,000 Daphnid, EC50, 96hr, mg/L

OECD 203 >43,000 Fathead Minnow, LC50, 96hr, mg/L

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal consider- ations	Dispose of contents/container in accordance with all local, regional, state, national and international regulations.
	Dispose of in accordance with all local, regional, state, national and international regulations.
Waste from residues/ unused products	
	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
ΙΑΤΑ	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 Sub- stances	Not listed as such
SARA Section 313	Does not contain any 313 ingredients
CERCLA Hazard- ous Substances	No reportable quantity for this product or its components

SECTION 16: OTHER INFORMATION

Revision date

6/28/2018



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