



# SAFETY DATA SHEET

## SECTION 1: IDENTIFICATION

### *Company Information:*

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

### *Emergency Contact Information:*

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

Product Name	Bioflo HFDU 40
Product Description	High-Performance Vegetable-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 (29 CFR 1910.1200), 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	0% of the mixture consists of ingredients with unknown toxicity

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<b>Components</b>	<b>CAS No.</b>	<b>Weight %</b>
Canola, oleic acid - high	228404-57-7	85-95%
Performance Package	MIXTURE	3-10%
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

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

### SECTION 5: FIREFIGHTING MEASURES

<b>Suitable extinguishing media</b>	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.
<b>Unsuitable extinguishing media</b>	For safety reasons, do not use a solid water stream as it may scatter and spread fire.
<b>Specific hazards that may develop</b>	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**

Dam up and soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust) as directed by material manufacturer for containment of spills. Clean contaminated area thoroughly.

**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
Canola oil, oleic acid-high	TLV: 10 mg/m(3) (as mist)	TWA: 15 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> (as mist)	TWA: 10 mg/m <sup>3</sup> (as 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</b>
<b>Odor Threshold</b>	<b>Not applicable</b>
<b>pH</b>	<b>Not applicable</b>
<b>Melting Point/ Freezing Point</b>	<b>Not available</b>
<b>Initial Boiling Point/ Range</b>	<b>Not available</b>
<b>Flash Point</b>	<b>&gt;550°F</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>

Solubility in water	Negligible
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not auto-flammable
Decomposition temperature	Not available
Viscosity @ 40C, cSt	37-42, typical

## 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. 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%**



## 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 6\_28\_2018



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