

Date of Issue: 1/27/2021

Version: 1.0

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product name: BioFlo Synthetic HFDU 46
Synonyms: Lubricant
CAS No.: Mixture

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture: Lubricant
Uses advised against: None known

1.3 Details of the supplier of the safety data sheet

BioBlend Renewable Resources, LLC
1500 Jarvis Ave.
Elk Grove Village, IL 60007
630.227.1800 | bioblend.com

1.4 Emergency telephone number

Emergency number: 630.227.1800 | M-F 8:00 AM - 4:00 PM


Section 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition: Mixture
Classification according to 29 CFR 1910.1200/ HazCom 2012 (GHS-US)
Skin sensitization, Category 1 H317: May cause an allergic skin reaction

2.2 Label Elements

Labeling according to 29 CFR 1910.1200/ HazCom 2012 (GHS-US)

Hazard pictograms: 

Signal Word: **WARNING!**

Hazard statements: H317: May cause an allergic skin reaction

Precautionary statements: P261: Avoid breathing dust/fumes/gas/mist/vapors/spray.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves.
P302+352: IF ON SKIN: Wash with plenty of soap and water.
P333+313: If skin irritation or a rash occurs: Get medical advice/attention.
P363: Wash contaminated clothing before reuse.
P501: Dispose of contents/container in accordance with local, state, and federal regulations.

Section 3 – Composition/information on ingredients

3.1 Substance

Not applicable. Product is a mixture.

BioFlo Synthetic HFDU 46

Safety Data Sheet according to 29 CFR 1910.1200/ HazCom 2012

3.2 Mixture

Chemical nature: Polyol ester with additives

Chemical Name	CAS No. (EC No.)	Concentration
N-Phenyl-1-naphthylamine	90-30-2	0.1 – 1.0%

This is not intended to be a complete compositional disclosure. See Section 8 for Exposure Limits, if any.

Section 4 - First aid measures

4.1 Description of first aid measures

- Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, get medical attention.
- Skin Contact:** Wash off immediately with soap and water. Remove contaminated clothing and shoes. If a rash or skin irritation occurs, contact a physician.
- Eye Contact:** Flush with copious amounts of water for at least 15 minutes, lifting eyelids for maximum effectiveness. Get medical attention if irritation develops or persists.
- Ingestion:** If swallowed, rinse mouth with water. Do NOT induce vomiting. If large amounts were ingested, consult a physician/poison control center. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Potential health symptoms and effects

- Inhalation:** Mists may cause irritation of the respiratory tract.
- Skin:** May cause an allergic skin reaction.
- Eyes:** May cause mild eye irritation.
- Ingestion:** May cause gastrointestinal distress.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

Section 5 - Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media:** Water spray, dry chemical, alcohol foam, or carbon dioxide.
- Unsuitable extinguishing media:** Water jet.

5.2 Special hazards arising from the substance or mixture

Closed containers may explode due to the buildup of pressure when exposed to extreme heat. Under fire conditions, product may undergo thermal decomposition and emit toxic fumes of CO_x.

5.3 Advice for firefighters

Full protective equipment including self-contained breathing apparatus and protective clothing should be used. Water may be used to cool containers to prevent pressure buildup and possible rupture when exposed to extreme heat. If possible, water contaminated by this material should be contained and prevented from being discharged to any waterway, sewer, or drain to avoid environmental contamination.

Section 6 - Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures

Avoid contact with skin and eyes. Wear protective gloves, eye protection, and face protection. Keep people away from and upwind of spill/leak. Ensure adequate ventilation, especially in confined areas.

6.2 Environmental precautions

Avoid dispersal of spilled material or runoff and prevent contact with soil and entry into drains, sewers, and waterways.

BioFlo Synthetic HFDU 46

Safety Data Sheet according to 29 CFR 1910.1200/ HazCom 2012

6.3 Methods and materials for containment and cleaning up

Cover drains and contain spill. Take up with inert absorbent material (e.g. vermiculite, general purpose binder). Shovel or sweep up product and place into an approved container for proper disposal. Wash walking surfaces with detergent and water to reduce slipping hazard. Dispose of material in accordance with local, state and federal regulations.

6.4 Reference to other sections

See section 13 for any additional waste treatment or disposal information.

Section 7 - Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Wear protective gloves, eye protection, and face protection. Keep people away from and upwind of spill/leak. Ensure adequate ventilation, especially in confined areas. Wash contaminated clothing and shoes before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, and well-ventilated area away from incompatible materials (see Section 10.5). Keep container tightly closed. Protect containers from physical damage. Containers may be hazardous when empty as they contain product residues.

7.3 Specific end uses

Apart from uses mentioned in Section 1.2, no other uses are specified.

Section 8 - Exposure controls/personal protection

8.1 Control parameters

Component/CAS No.	Basis	Type	Value	Remarks
N-Phenyl-1-naphthylamine (90-30-2)	None established			-

8.2 Exposure Controls

Engineering Measures:	Safety measures and appropriate working conditions should be given priority, with use of personal protective equipment a secondary measure. Use adequate ventilation to reduce the exposure of mists or vapors. Facility should be equipped with an eyewash station and safety shower.
Hygiene Measures:	Avoid contact with eyes or skin. Wash hands thoroughly after use and before eating, drinking or bathroom use.
Personal Protective Equipment (PPE):	
Hand Protection:	Wear gloves recommended by glove supplier as impervious to materials in Section 3.
Eye Protection:	Wear protective goggles or safety glasses with side shields and/or full face shield.
Skin Protection:	Wear protective clothing.
Respiratory Protection:	If ventilation is limited or use may generate aerosols or mists, use full-face respirator with multi-purpose cartridges.

Section 9 - Physical and chemical properties

9.1 Information of basic physical and chemical properties

Form and Appearance:	Clear, light yellow to amber liquid	Odor:	Characteristic
pH:	N/A	Odor Threshold:	N/D
Boiling Point:	> 482°F (250°C)	Melting/Freezing point:	N/D
Vapor Pressure:	N/D	Vapor Density (Air=1):	N/A

BioFlo Synthetic HFDU 46

Safety Data Sheet according to 29 CFR 1910.1200/ HazCom 2012

Flash Point:	> 482°F (250°C)	Evaporation Rate:	N/D
UEL:	N/A	LEL:	N/A
Viscosity:	~ 105 cSt @ 20°C	Solubility in Water:	Insoluble
Octanol/Water Partition Coefficient:	N/D	Specific Gravity/Bulk Density:	~ 0.92 @ 20°C
Auto-ignition temperature:	N/D	Decomposition Temperature:	N/D
Volatile content:	N/D	VOC Data:	N/D

9.2 Other information

No data available.

Section 10 - Stability and reactivity

10.1 Reactivity

None known.

10.2 Chemical stability

Product is stable under ordinary conditions of use and storage.

10.3 Possibility of hazardous reactions

Will not occur under ordinary conditions of use and storage.

10.4 Conditions to avoid

Contact with incompatible materials, moisture, and extreme heat.

10.5 Incompatible materials

Strong oxidizers, strong acids.

10.6 Hazardous decomposition products

Thermal decomposition may produce toxic fumes of CO_x.

Section 11 - Toxicological information

11.1 Information on toxicological effects

Acute Oral Toxicity

LD50, rat: > 2,000 mg/kg (ATE mix)

Acute Inhalation Toxicity

No data available

Acute Dermal Toxicity

No data available

Skin Irritation/Corrosion

Non-irritating.

Eye Irritation/Corrosion

Non-irritating.

Sensitization

Sensitizing. May cause an allergic skin reaction.

Genotoxicity in Vitro

BioFlo Synthetic HFDU 46

Safety Data Sheet according to 29 CFR 1910.1200/ HazCom 2012

No data available

Mutagenicity

No data available

Specific Target Organ Toxicity – Single Exposure

No data available

Specific Target Organ Toxicity – Repeated Exposure

No data available

Aspiration Hazard

No effects known

11.2 Further Information

This material is not listed as a carcinogen by IARC, ACGIH, NTP, or OSHA. No data is available regarding the mutagenicity or teratogenicity of this material in humans, nor is there available data that indicates that it causes adverse development or fertility effects in humans. Handle in accordance with good industrial hygiene and safety practice.

Section 12 - Ecological information

12.1 Toxicity

Acute and Chronic Aquatic Toxicity: LC50 (96h) – Fish: > WSL EC50 (48h) – Daphnia magna: > WSL

12.2 Persistence and Degradability

Readily biodegradable. Elimination: ~ 80% in 28d (OECD 301B)

12.3 Bioaccumulation Potential

No data available

12.4 Mobility in Soil

No data available

12.5 Results of PBT and vPvB Assessment

No data available

12.6 Other Adverse Effects

Do not allow material to run into surface waters, wastewater, or soil.

Section 13 - Disposal considerations

13.1 Waste treatment methods

Methods of disposal: Unused product or empty containers may be disposed of as non-hazardous in accordance with local, state, provincial and national disposal regulations.

Hazardous waste: This material, as sold, is not considered a hazardous waste under RCRA 40 CFR 261.

Section 14 - Transport regulations

Land Transport (DOT, ADR/RID)

Not classified as dangerous in transport

Air Transport (IATA/ICAO)

Not classified as dangerous in transport

BioFlo Synthetic HFDU 46

Safety Data Sheet according to 29 CFR 1910.1200/ HazCom 2012

Marine Transport (IMDG)

Not classified as dangerous in transport

Section 15 - Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Federal Regulations

SARA 311/312 Hazards	Acute Health Hazards
SARA 302/304 (TPQ/RQ)	No components listed
SARA 313	No components listed
CERCLA (RQ)	No components listed
CAA 112(b) HAPS	No components listed

U.S. State Regulations

California Prop. 65	No components listed
State RTK/HSL Information	No components listed

International Regulations

No additional information available

Chemical Inventory Listing

United States (TSCA)	Listed or exempt.
European Union (EINECS/ELINCS/NLP)	Listed or exempt
Australia (AICS)	Listed or exempt
Philippines (PICCS)	Listed or exempt
Canada (DSL/NDSL)	Listed or exempt
Korea (KECL)	Listed or exempt
Japan (ENCS/ISHL)	Listed or exempt
China (IECSC)	Listed or exempt
New Zealand (NZIoC)	Listed or exempt

Section 16 – Additional information

Date of latest revision: 1/27/2021

Key to Abbreviations:

N/D - Not determined N/A - Not applicable N/E - Not established WSL – Water solubility limit

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