

Food-Grade Lubricants & Cleaning Products



Your manufacturing excellence and product quality matter!

MATERIAL SAFETY DATA SHEET

BIOFLOW 46 - BIOFLOW 68

1. PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME	BIOFLOW 46 - BIOFLOW 68
Product number	Not assigned
SYNONYMS	BIOFLOW 46 - BIOFLOW 68
PRODUCT USE	Food Grade Hydraulic Oil This product conforms to the FDA requirements for lubricants with incidental food contact in 21 CFR 178.3570.
SUPPLIER	Consumer Ready Products. 1001 East Centralia Drive Elkhorn, WI 53121 Tel: (262) 723 - 6604 Fax: (262) 723 - 6730
EMERGENCY TELEPHONE	INFOTRAC U.S. and Canada - (800) 535-5053 Outside the U.S. and Canada - +01-352-323-3500
Date of last issue	2007-03-20

2. COMPOSITION AND INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS No.	WEIGHT
VEGETABLE OILS, HIGHLY REFINED**(8)	Mixture	70-90 %
VISCOSITY MODIFIER, FOOD GRADE (HX-1)	Proprietary	5-10
BUTENE, HOMOPOLYMER (COMMON NAME: POLYBUTENES)	9003-29-6	3-20 %

COMPOSITION COMMENTS

Refer to section eight for exposure limits on ingredients.

Chemical ingredients not regulated by OSHA, SARA, state or federal agencies are treated confidentially.

**(8) The vegetable oils used in this product can be a mixture of any of the following highly refined vegetable oils: Canola (CAS# 120962-03-0), Sunflower (CAS# 8001-21-6), Soybean (CAS# 8001-22-7), Corn (CAS# 8001-30-7), and Linseed (CAS# 8001-26-1).

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

	Exposure to vapors generated at high temperatures may cause respiratory irritation.
SENSITIZATION	No known information.
CARCINOGENICITY	IARC: Not listed as a Group 1, 2A, or 2B agent. NTP: Not listed. OSHA: Not regulated.
TERATOGENICITY	No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.
HEALTH WARNINGS	INGESTION. Can cause discomfort. INHALATION. Heating can generate vapors that may cause respiratory irritation, nausea and headaches. Inhalation hazard at room temperature is unlikely due to the low volatility of this product. EYE CONTACT. Slightly irritating. SKIN CONTACT. Repeated or prolonged contact can result in drying of the skin.
ROUTE OF ENTRY	Skin and/or eye contact. Ingestion. Inhalation.

4. FIRST AID MEASURES

INHALATION	Remove victim immediately from source of exposure. Get medical attention if any discomfort continues. For breathing difficulties oxygen may be necessary. If breathing stops, provide artificial respiration.
EYES	Important! Immediately rinse with water for at least 15 minutes. Get medical attention if any discomfort continues.
SKIN	Remove contaminated clothing. Wash skin thoroughly with soap and water. Contact physician if irritation persists.
INGESTION	DO NOT induce vomiting. Get medical attention immediately.

5. FIRE FIGHTING MEASURES

FLASH POINT (°C)	> 200 (392°F) P/M Pinsky-Martens, based on lowest flash point of significant components.
FLAMMABILITY LIMIT - LOWER(%)	N/D
FLAMMABILITY LIMIT - UPPER(%)	N/D
FLAMMABILITY CLASS	3.2 Combustible Liquid IIIB - Flash Point equal to or greater than 200°F.
EXTINGUISHING MEDIA	Use: Dry chemicals, sand, dolomite etc. Foam. Carbon dioxide (CO ₂).
SPECIAL FIRE FIGHTING PROCEDURES	Use water to keep fire exposed containers cool and disperse vapors. Prevent water from coming in contact with the product. Keep run-off water out of sewers and water sources. Dike for water control. Use special protective clothing. Regular protection may not be safe. Prevent inhalation of fumes and gases.
UNUSUAL FIRE & EXPLOSION HAZARDS	Volume and pressure increases strongly when heated. Risk of container explosion in fire.
HAZARDOUS COMBUSTION PRODUCTS	Acrid smoke/fumes. Unsaturated hydrocarbons. Oxides of: Carbon.
PROTECTIVE MEASURES IN CASE OF FIRE	Self-contained breathing equipment and chemical resistant clothing recommended.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	Minimize skin contact. Remove sources of ignition.
SPILL CLEAN-UP PROCEDURES	Carefully collect spilled material in closed containers and leave for disposal according to local regulations. Provide good ventilation. Use appropriate protective clothing. Rinse area with water. Do not let washing down water contaminate ponds or waterways.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS	Avoid spilling, skin and eye contact. Keep away from heat, sparks and open flame. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Containers to be kept tightly closed. Eye wash and emergency shower must be available at the work place.
STORAGE PRECAUTIONS	Keep away from heat, sparks and open flame. Store separated from: Acids. Oxidizing materials.
STORAGE CRITERIA	Chemical storage.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

COMPONENT	STD	TWA	STEL	TWA	STEL
VEGETABLE OILS, HIGHLY REFINED**(8)	OSHA	15 mg/m ³	(total mist)	5 mg/m ³	(resp mist)
	ACGIH	NIC 2005	-WITHDRAW TLV	10 mg/m ³	(as vegetable oil mists)

PROTECTIVE EQUIPMENT



ENGINEERING CONTROLS	Use engineering controls to reduce air contamination to permissible exposure level.
VENTILATION	No specific ventilation requirements noted, but forced ventilation may still be required if air contamination exceeds acceptable level.
RESPIRATORS	No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.
PROTECTIVE GLOVES	Chemical resistant gloves required for prolonged or repeated contact. Use protective gloves made of: Neoprene, nitrile, polyethylene or PVC. or latex.
EYE PROTECTION	Wear splash-proof eye goggles to prevent any possibility of eye contact.
PROTECTIVE CLOTHING	Wear appropriate clothing to prevent repeated or prolonged skin contact.
HYGIENIC WORK PRACTICES	Wash at the end of each work shift and before eating, smoking and using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE	Jelly-like.		
COLOR	Light (or pale). Amber.		
ODOR	Mild (or faint).		
SOLUBILITY DESCRIPTION	Insoluble in water.		
DENSITY	~ 0.90	Temperature (°C)	15.6 (60°F)
VAPOR PRESSURE	< 1 mmHg	Temperature (°C)	20 (68°F)
EVAPORATION RATE	< 1	Reference	BuAc=1
pH-VALUE, CONC. SOLUTION	N/A		

10. STABILITY AND REACTIVITY

STABILITY	Normally stable.
CONDITIONS TO AVOID	Avoid contact with strong oxidizers. Avoid excessive heat for prolonged periods of time.
HAZARDOUS POLYMERIZATION	Will not polymerize.
HAZARDOUS DECOMPOSITION PRODUCTS	Unsaturated hydrocarbons. Oxides of: Carbon.

11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION	No experimental toxicological data on the preparation as such is available.
COMPONENT	VEGETABLE OILS, HIGHLY REFINED**(8)
TOXIC DOSE - LD 50	No Information Available (NIA).
TOXIC CONC. - LC 50	No Information Available (NIA).
COMPONENT	VISCOSITY MODIFIER, FOOD GRADE (HX-1)

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION	No data on possible environmental effects have been found.
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13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS Spilled material, unused contents and empty containers must be disposed of in accordance with local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT HAZARD CLASS Non-Hazardous (No label required).

TDGR CLASS Not Regulated.

SEA TRANSPORT NOTES Not regulated per IMDG.

AIR TRANSPORT NOTES Not regulated per IATA.

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

COMPONENT	SARA 302	CERCLA	SARA 313
VEGETABLE OILS, HIGHLY REFINED**(8)	No	No	No
VISCOSITY MODIFIER, FOOD GRADE (HX-1)	No	No	No
BUTENE, HOMOPOLYMER (COMMON NAME: POLYBUTENES)	No	No	No

CLEAN AIR ACT

SARA HAZARD CATEGORIES None

US STATE REGULATIONS

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM - WHMIS

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

CONTROLLED PRODUCT CLASSIFICATION Not a controlled product.

GLOBAL INVENTORIES

COMPONENT	CAN	US	EU	AUS	JAP	KOR	PHLP	CHN
VEGETABLE OILS, HIGHLY REFINED**(8)	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
VISCOSITY MODIFIER, FOOD GRADE (HX-1)	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
BUTENE, HOMOPOLYMER (COMMON NAME: POLYBUTENES)	DSL	Yes	Polymer	Yes	Yes	Yes	Yes	Yes

CANADA CEPA: All components of this product comply with new substance notification

requirements under the Canadian Environmental Protection Act (CEPA).

16. OTHER INFORMATION

NFPA-HMIS HAZARD RATING

HEALTH	Irritation, minor residual injury (1) - HMIS/NFPA
FLAMMABILITY	Burns only if pre-heated (1) - HMIS/NFPA
REACTIVITY	Normally Stable (0) - HMIS/NFPA
PERSONAL PROTECTION INDEX	B - Safety Eyewear and Gloves
REVISION COMMENTS	Section 1: Name Change Section 2: Ingredients
PREPARED BY	James W. Hermann
Replacement of MSDS generated	2007-03-12
DATE	2007-03-20
DISCLAIMER	While the information and recommendations set forth herein are believed to be accurate as of the date thereof, the company makes no warranty with respect thereto and disclaims all liability from reliance therein.
* Information revised since previous MSDS version	
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