



SAFETY DATA SHEET BIO-AID

SECTION 1: IDENTIFICATION

Product Name:	Bio-Aid
Product Code:	B10
Product Use:	Biodiesel additive
Manufacturer's Name:	E-ZOIL Products, Inc.
Address:	234 Fillmore Avenue
Address:	Tonawanda, NY 14150 USA
Business Phone:	855-693-9645
Emergency Phone:	800-633-8253 PERS
Date of Preparation:	October 1, 2015
Date of Last Revision:	October 1, 2018
Regulatory Standard:	CFR29 1910.1200 HazCom 2012

SECTION 2: HAZARDS IDENTIFICATION

GHS-US classification
Flammable Liquid 4
Acute toxicity 4 (Oral)
Skin Irritation 2
Eye Irritation 2A
Carcinogenicity 2
Aspiration Toxicity 1

Hazard pictograms (GHS-US):



Signal word (GHS-US): Danger

Hazard statements (GHS-US): Combustible liquid. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer. May be fatal if swallowed and enters airways.

Precautionary statements: Keep away from flames/hot surfaces. No smoking. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/ protective clothing/eye protection/face protection. If exposed or concerned: Get medical advice or attention. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/ attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If swallowed: Immediately call a poison center/doctor. Rinse mouth. Do NOT induce vomiting. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container in accordance with local, regional, national and international regulations.

Other information: None.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS Number	%
Ethylene glycol butyl ether	111-76-2	60 - 100
Triethylamine	102-71-6	1 - 5
Fatty Acid	Trade Secret	1 - 5
Naphthalene	91-20-3	1 - 5
Vinyl acetate	108-05-4	1 - 5

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4: FIRST AID MEASURES

- First-aid measures after inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
- First-aid measures after skin contact: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
- First-aid measures after eye contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists, get medical attention.
- First-aid measures after ingestion: If swallowed, do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed:

- Symptoms/injuries after inhalation: May cause respiratory tract irritation.
- Symptoms/injuries after skin contact: Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
- Symptoms/injuries after eye contact: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
- Symptoms/injuries after ingestion: Harmful if swallowed. May cause stomach distress, nausea or vomiting. May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis.

Indication of any immediate medical attention and special treatment needed:

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: FIRE FIGHTING MEASURES

Suitable extinguishing media: Foam. Dry chemical. Carbon dioxide.

Unsuitable extinguishing media: None known.

Fire hazard: Flammable liquid and vapor. Products of combustion may include, and are not limited to: oxides of carbon.

Explosion hazard: May form flammable/explosive vapor-air mixture.

Protection during firefighting: Keep upwind of fire. Wear full firefighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back. Use water spray to keep fire-exposed containers cool.

SECTION 6: ACCIDENTAL RELEASE MEASURES

General measures: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.

For containment: Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up: Scoop up material and place in a disposal container. Provide ventilation.

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: HANDLING AND STORAGE

Additional hazards when processed: Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling: Keep away from sources of ignition - No smoking. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Use personal protective equipment as required.

Hygiene measures: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

Technical measures: Proper grounding procedures to avoid static electricity should be followed.

Storage conditions: Keep out of the reach of children. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area. Keep container tightly closed when not in use.

Storage temperature: 39 – 120°F

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Ethylene glycol butyl ether (111-76-2)		
ACGIH	ACGIH TWA (ppm)	20 ppm

OSHA	OSHA PEL (TWA) (mg/m ³)	240 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	50 ppm

Triethylamine (102-71-6)		
ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³
OSHA	Not applicable	

Fatty Acid		
ACGIH	Not applicable	
OSHA	Not applicable	

Benzene, trimethyl- (25551-13-7)		
ACGIH	ACGIH TWA (ppm)	25 ppm
OSHA	Not applicable	

1,3,5-Trimethylbenzene (108-67-8)		
ACGIH	Not applicable	
OSHA	Not applicable	

Naphthalene (91-20-3)		
ACGIH	ACGIH TWA (ppm)	10 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	50 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	10 ppm

Appropriate engineering controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Hand protection: Wear chemically resistant protective gloves.

Eye protection: Wear safety glasses with side shields or goggles.

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Environmental exposure controls: Maintain levels below community environmental protection thresholds.

Other information: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Appearance:	No data available
Color:	Light yellow
Odor:	Mild
Odor threshold:	No data available

pH:	No data available
Melting point:	No data available
Freezing point:	No data available
Boiling point:	340°F (171°C)
Flash point:	162°F (72°C)
Relative evaporation rate:	No data available
Flammability (solid, gas):	Flammable
Explosive limits:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available
Vapor pressure:	0.6 mm Hg @ 68 °F
Relative density:	0.897
Relative vapor density at 20 °C:	4.1 (Air =1)
Solubility:	Water > 90 %
Partition coefficient: n-octanol/water:	No data available
Log Kow:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available
Viscosity, kinematic:	No data available
Viscosity, dynamic:	No data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical Stability: Stable under normal storage conditions. May form flammable/explosive vapor-air mixture.

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.

Conditions to avoid: Heat. Incompatible materials. Sources of ignition.

Incompatible materials: Oxidizers.

Hazardous decomposition products: May include, and are not limited to: oxides of carbon.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity: Harmful if swallowed.

Bio-Aid	
LD50 oral rat	> 300 but ≤ 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Bio-Aid	
LC50 inhalation rat	> 20 mg/l/4h

Ethylene glycol butyl ether (111-76-2)	
LD50 oral rat	1300 mg/kg

Triethylolamine (102-71-6)	
LD50 oral rat	4190 mg/kg
LD50 dermal rabbit	> 20 ml/kg

Fatty Acid	
LD50 oral rat	25 g/kg

Benzene, trimethyl- (25551-13-7)	
LD50 oral rat	8970 mg/kg
1,3,5-Trimethylbenzene (108-67-8)	
LC50 inhalation rat	24 g/m ³ /4h
Naphthalene (91-20-3)	
LD50 oral rat	490 mg/kg
LD50 dermal rabbit	> 20 g/kg

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitization: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Suspected of causing cancer.

Ethylene glycol butyl ether (111-76-2)	
IARC group	3 - Not classifiable
Triethylamine (102-71-6)	
IARC group	3 - Not classifiable
Naphthalene (91-20-3)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity, 3 - Reasonably anticipated to be Human Carcinogen

Reproductive toxicity: Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure): Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.

Aspiration hazard: May be fatal if swallowed and enters airways.

Symptoms/injuries after inhalation: May cause respiratory tract irritation.

Symptoms/injuries after skin contact: Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Symptoms/injuries after eye contact: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Symptoms/injuries after ingestion: Harmful if swallowed. May cause stomach distress, nausea or vomiting. May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis.

SECTION 12: ECOLOGICAL INFORMATION

Ecology - general: May cause long-term adverse effects in the aquatic environment.

Persistence and degradability

Bio-Aid

Persistence and degradability	Not established.
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Bioaccumulative potential

Bio-Aid	
Bioaccumulative potential	Not established.

Mobility in soil: No additional information available

Other adverse effects: Effect on the global warming – No known ecological damage caused by this product.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste disposal recommendations: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

Additional information: Handle empty containers with care because residual vapors are flammable.

SECTION 14: TRANSPORT INFORMATION

UN number: NA1993

Proper shipping name: Combustible liquid, n.o.s., (Ethylene glycol monobutyl ether)

Transport hazard class(es): Combustible liquid

Packing group: III

SECTION 15: REGULATORY INFORMATION

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Federal regulations:

Naphthalene (91-20-3)	
Subject to reporting requirements of United States SARA Section 313	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 313 - Emission Reporting	0.1 %
Vinyl acetate (108-05-4)	
Listed on the United States SARA Section 302	
Subject to reporting requirements of United States SARA Section 313	
SARA Section 302 Threshold Planning Quantity (TPQ)	1000
SARA Section 313 - Emission Reporting	0.1 %

State regulations:

Bio-Aid	
State or local regulations	This product contains a chemical known to the State of California to cause cancer.

SECTION 16: OTHER INFORMATION

Other information: None.

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