



## PRODUCT INFORMATION BULLETIN

### BIO SOLV

Regulatory Agency Information  
OSHA-DOT

PREPARATION/REVISION DATE  
LMP 6/10/14

# Product Information Bulletin

## MATERIAL SAFETY DATA SHEET

TRADE NAME: BIO SOLV

ETHYL LACTATE BLEND

### SECTION 1

#### MANUFACTURER'S NAME

BIO BRANDS, LLC

#### EMERGENCY TELEPHONE NO.

800-424-9300 (CHEMTREC)

#### ADDRESS

602 Union Landing Road  
Cinnaminson, NJ 08077 856 303-9245 800-398-7556

#### CHEMICAL NAME

Ethyl Hydroxy Propionate / proprietary co-solvent

#### COMMON NAME

Ethyl Lactate Blend

#### DOT CLASSIFICATION

Combustible Liquid

#### FORMULA

Blend

### SECTION 2 HAZARDOUS INGREDIENTS

#### CHEMICAL OR COMMON NAME

Ethyl Lactate  
Proprietary co-solvent  
Inhibitor

#### PERCENT

10-90  
10-90  
<0.01

#### CAS NO.

97-64-3  
Proprietary  
Proprietary

#### APPLICABLE PEL-OSHA

None established  
None established  
None established

#### EXPOSURE LIMITS TLV-ACGIH

None established  
None established  
None established

### CARCINOGENIC INGREDIENTS

#### CHEMICAL OR COMMON NAME

None identified

#### %

-

#### REFERENCE IARC

-

#### SOURCE NTP

-

#### OSHA

-

#### OTHER

-

### SECTION 3 HEALTH HAZARD DATA

#### ACUTE HEALTH EFFECTS

Eyes Irritant.  
Skin Contact Not an irritant.  
Ingestion May cause irritation of the digestive tract.  
Inhalation Prolonged exposure may cause irritation of mucous membranes.

#### CHRONIC HEALTH EFFECTS

None known, not listed as a carcinogen.

#### ROUTES OF ENTRY

Most common, skin and inhalation.

#### MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Mist may cause eye/respiratory irritation with coughing.

### SECTION 4 FIRST AID MEASURES

#### EYES SKIN INHALATION INGESTION

Immediately flush with water for at least 15 minutes. See a medical doctor immediately.  
Wash affected area with soap and water.  
Remove person to fresh air. If discomfort occurs and persists, obtain medical attention.  
See a medical doctor immediately.

### SECTION 5 FIRE FIGHTING MEASURES

#### EXTINGUISHING MEDIA SPECIAL FIREFIGHTING PROCEDURES DEGREE OF FIRE AND EXPLOSION HAZARD HAZARDOUS DECOMPOSITION PROCEDURES

Water, water fog, carbon dioxide (CO<sub>2</sub>), dry chemical.  
Wear a self-contained breathing apparatus.  
  
Moderate. Rags soaked with any solvent can present a fire hazard and should be stored in UL listed or Factory Mutual approved, covered containers. Forms peroxides of unknown stability if material becomes uninhibited. Not an explosion hazard when inhibited.  
None required when completely combusted, decomposes to water and CO<sub>2</sub>. However, during a fire, incomplete combustion can result in the production of CO.

### SECTION 6 ACCIDENTAL RELEASE / SPILL MEASURES

#### PROCEDURE FOR RELEASE OR SPILL

Cover with large quantity of absorbent material (e.g. kitty litter) and collect in drums for disposal. Clean contaminated area with soap and water.

SECTION 7					CHEMICAL AND PHYSICAL DATA				
MELTING POINT (°C)	ND	SPECIFIC GRAVITY (H <sub>2</sub> O=1)		0.988					
BOILING POINT	300° F	PERCENT VOLATILE BY VOLUME (%)		100					
VAPOR PRESSURE (mmHg)	0.54 @ 68°F	EVAPORATION RATE (butyl acetate=1)		0.14					
VAPOR DENSITY (AIR=1)	4.6	pH OF WATER DISPERSION		4.8, 10% solution					
SOLUBILITY	Partially	APPEARANCE AND ODOR		Clear colorless liquid, pungent ester odor.					
FLASH POINT	133° F, ASTM D93	FLAMMABLE LIMITS		LeI		Uel			
		@ 212 F		No data		No data			
EXTINGUISHING MEDIA - Water, foam, CO <sub>2</sub>		ODOR THRESHOLD		No data					
SPECIAL FIRE FIGHTING PROCEDURES		VOC CONTENT		988 g/l (8.24 lbs/gal)					
Wear a self-contained breathing apparatus		BULK DENSITY (G/ML)							
INCOMPATIBILITY (materials to avoid)		PARTITION COEFFICIENT (n-octanol/water)		No data					
Strong oxidizing agents, acids and alkalis.		AUTOIGNITION TEMPERATURE		No data					
HAZARDOUS DECOMPOSITION PRODUCTS		EXPLOSIVE PROPERTIES		Not applicable					
Incomplete combustion can produce CO.		OXIDIZING PROPERTIES		Not applicable					
SECTION 8							STABILITY AND REACTIVITY DATA		
STABILITY				Forms peroxides if material becomes uninhibited.					
HAZARDOUS POLYMERIZATION				None known					
CONDITIONS TO AVOID				Heat sparks and open flame					
MATERIALS TO AVOID				Strong oxidizing agents, acids and alkalis.					
MAJOR CONTAMINANTS THAT CONTRIBUTE TO INSTABILITY				None known					
INCOMPATIBILITY				None known					
HAZARDOUS DECOMPOSITION PRODUCTS				Carbon monoxide					
SENSITIVITY TO MECHANICAL IMPACT				None known					
SENSITIVITY TO STATIC DISCHARGE				None known					
SECTION 9							TOXICOLOGICAL INFORMATION		
EYE CONTACT				Irritant					
SKIN CONTACT				No data available					
SKIN ABSORPTION				No data available					
INHALATION				No data available					
INGESTION				No data available					
ACUTE EFFECTS FROM OVEREXPOSURE				May cause irritation of the eyes.					
CHRONIC EFFECTS FROM OVEREXPOSURE				None identified					
(effects considered include: <i>sensitivities, carcinogenicity, teratogenicity, mutagenicity, synergistic products, and any medical conditions generally recognized as being aggravated by exposure</i> )									
SECTION 10							ECOLOGICAL INFORMATION		
ENVIRONMENTAL FATE				100% Biodegradable					
ENVIRONMENTAL EFFECTS				No adverse effects known or suspected. Not listed toxic chemical under SARA Title III 302, 304 or 313.					
SECTION 11							HANDLING AND STORAGE		
HANDLING				Keep container tightly closed. Minimize exposure to air.					
VENTILATION				Use adequate general or local exhaust ventilation to keep vapor and mist levels as low as possible.					
STORAGE				Store in a cool, dry, well ventilated, liquid storage area.					
SECTION 12							EXPOSURE CONTROL / PERSONAL PROTECTION		
RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT				None required where adequate ventilation conditions exist.					
RESPIRATORY									
VENTILATION				Recommended					
Local Exhaust				In most cases adequate ventilation can be achieved by use of an industrial floor or pedestal fan, combined with sizable inlet and outlet openings to the workspace, such as doors and/or windows.					
Mechanical (general)				Use chemical goggles.					
EYE PROTECTION				Use impervious gloves to prevent skin contact.					
GLOVES				Aprons recommended. If clothing becomes contaminated, remove and launder before reuse.					
SPECIAL CLOTHING AND EQUIPMENT				None identified					
OTHER PROTECTIVE EQUIPMENT				Industrial safety shoes are recommended in all industrial settings.					
FOOT PROTECTION				None identified					
OTHER ENGINEERING CONTROLS				Do not smoke in areas of storage or use. Avoid all contact with skin and eyes.					
WORK PRACTICES				Minimize eye and skin contact by using appropriate protective equipment. Use local or general room ventilation to control vapors or mist that may be generated into the work environment.					
CONTROL MEASURES									

SECTION 13 SPECIAL PRECAUTIONS DATA	
<b>PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING</b>	
Avoid all contact with eyes or skin. Wear the appropriate protective equipment. Protect containers from physical damage.	
<b>MAINTENANCE PERSONNEL</b>	
Wash down vessels. Check the oxygen and combustible vapor content of the vessel atmosphere. Use the appropriate protective equipment.	
SECTION 14 DISPOSAL PROCEDURES	
<b>WASTE DISPOSAL METHOD</b>	Take up with sand or other non-combustible absorbent material and place into container for later disposal. Flush area with water. Dispose in accordance with all applicable Federal, State, and local environmental regulations. Spent product may be offered for fuel blending incineration.
SECTION 15 TRANSPORT INFORMATION	
<b>DOT PROPER SHIPPING NAME</b>	BIO SOLV (under 119 gallons)
<b>IATA</b>	UN1993, Flammable Liquids, n.o.s. (Ethyl Lactate, Ethyl-3-ethoxyproionate)
<b>IMDG</b>	UN1993, Flammable Liquids, n.o.s. (Ethyl Lactate, Ethyl-3-ethoxyproionate)
<b>DOT CLASSIFICATION</b>	Combustible liquid
<b>DOT LABELS</b>	None required, under 119 gallons
<b>DOT MARKING</b>	Not applicable
<b>DOT PLACARD</b>	Bulk: Combustible Liquid, 1993
<b>IDENTIFICATION NUMBER</b>	NA 1993
<b>PACKAGING GROUP</b>	PG III
<b>HAZARDOUS SUBSTANCE/RQ</b>	None
<b>49 STCC NUMBER</b>	Not applicable
<b>PRECAUTIONS TO BE TAKEN IN TRANSPORTATION</b>	None needed
<b>OTHER SHIPPING INFORMATION</b>	None
SECTION 16 REGULATORY INFORMATION	
<b>OSHA EXPOSURE LIMITS SUBSTANCE(S)</b>	Ethyl Lactate, Proprietary co-solvent
<b>OSHA PEL-TWA</b>	None established
<b>STEL</b>	None established
<b>CEILING</b>	None established
<b>SKIN DESIGNATION</b>	None established
<b>ACGIH TLV-TWA</b>	None established
<b>STEL</b>	None established
<b>CEILING</b>	None established
<b>SKIN DESIGNATION</b>	None established
<b>TARGET ORGAN EFFECTS</b>	Eye
<b>CARCINOGENIC POTENTIAL</b>	None
<b>REGULATED BY OSHA</b>	No
<b>LISTED ON NTP REPORT</b>	No
<b>IARC GROUP 1, 2A, 2D</b>	No
<b>US EPA REQUIREMENTS RELEASE REPORTING CERCLA (40 CFR 302)</b>	
<b>LISTED SUBSTANCE(S)</b>	Not listed
<b>RQ</b>	Not applicable
<b>Category</b>	Not applicable
<b>RCRA waste number</b>	Not applicable
<b>UNLISTED SUBSTANCE(S)</b>	Ethyl Lactate, Proprietary co-solvent
<b>RQ</b>	None
<b>Characteristic</b>	Ignitability
<b>RCRA waste number</b>	D001
<b>SARA TITLE III SEC 313 (40 CFR 372)</b>	
<b>Listed toxic chemical</b>	Not listed
<b>INVENTORY REPORTING SARA TITLE III SEC 311/312 (40 CFR 370)</b>	
<b>Substance(s)</b>	Ethyl Lactate, Proprietary co-solvent
<b>Hazard category</b>	Immediate health hazard, Fire hazard
<b>Planning threshold</b>	10,000 pounds
<b>Emergency planning</b>	
<b>SARA TITLE III SEC 302-303 (40 CFR 355)</b>	
<b>LISTED SUBSTANCE(S)</b>	Not applicable
<b>RQ</b>	Not applicable
<b>PLANNING THRESHOLD</b>	Not applicable
<b>US TSCA STATUS</b>	Listed
<b>CANADA INGREDIENT DISCLOSURE LIST SUBSTANCE(S)</b>	
<b>CONTROLLED PRODUCT</b>	Not listed
<b>HAZARD SYMBOLS</b>	
<b>CLASS AND DIVISION</b>	Class B, Division 2
<b>PRODUCT IDENTIFICATION NO.</b>	
<b>DOMESTIC SUBSTANCE LIST</b>	Listed
<b>CEPA PRIORITY LIST</b>	Not listed

SECTION 16		REGULATORY INFORMATION		(CONTINUED)	
		CARCINOGENICITY	Not listed in either OSHA, ACGIH, NTP, or IARC		
		ACGIH APPENDIX A	Not listed		
		A1 - CONFIRMED HUMAN	Not listed		
		A1 - SUSPECTED HUMAN	Not listed		
		EINECS (Europe)	202-598-0, proprietary co-solvent, listed		
		METI/CSCL (Japan)	2-1371, proprietary co-solvent, listed		
		IECSC (China)	Listed		
		AICS (Australia)	Listed		
		ERMA (New Zealand)	Listed		
		IARC GROUP 1 OR 2	No		
		LABEL LANGUAGE (US/CANADA) HEALTH			
		PHYSICAL HANDLING AND STORAGE	Keep container tightly closed. Minimize exposure to air. Store in a cool, dry, well-ventilated liquid storage area.		
		FIRST AID	In case of contact, immediately flush eyes with water for at least 15 minutes. If irritation persists, obtain medical attention. Wash skin with soap and water.		
		STATE REGULATIONS			
SECTION 17 ADDITIONAL INFORMATION					
SECTION 18			HMIS LABEL		
HEALTH		FLAMMABILITY	REACTIVITY	PERSONAL PROTECTION	
1		2	0	B	

## DEPARTMENT OF TRANSPORTATION

Hazardous Materials Regulations, 49 CFR

Exception allowed under 173.150

(Under 119 gallons)

Proper Shipping Name:	BIOSOLV
Hazard Class:	Combustible liquid
Packaging Group:	III
Reportable Quantity:	None
Label Required (Drums):	None
Placard Required (Bulk):	Combustible liquid, NA1993
Max. Quantity Pass. Aircraft:	60L/container
Max. Quantity Cargo Aircraft:	220L/container
Stowage on Vessels:	Above or Below Deck

*The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.*