

SAFETY DATA SHEET

BioSolv

Revised: 2/17/22

Replaces: 8/17/20

1. IDENTIFICATION

Product Identifier: Bio-Solv
CAS Number: Mixture
Recommended Use: Resin cleaning
Restrictions on Use: No data available.

BioBrands LLC
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Cinnaminson NJ 08077

EMERGENCY RESPONSE NUMBER: CHEMTREC
Domestic: (800) 424-9300
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2. HAZARD(S) IDENTIFICATION

GHS Classification(s): Serious Eye Damage/Eye Irritation Category 1
Skin Corrosion/Irritation Category 2
Flammable Liquid Category 3
Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3

GHS Label Elements:

GHS Hazard Symbols:



Signal Word: Danger

Hazard Statements: Flammable liquid and vapor.
Causes skin irritation.
Causes serious eye damage.
May cause respiratory irritation.

Precautionary Statements:

Prevention: Keep away from heat, sparks, open flames, and hot surfaces. – No smoking.
Ground and bond container and receiving equipment.
Use explosion-proof electrical, ventilating, and lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust, gas, mist, vapors, or spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/physician.
Specific treatment (see First Aid on SDS or on this label).
If skin irritation occurs: Get medical advice or attention.
Take off contaminated clothing and wash before reuse.
In case of fire: Use water fog, carbon dioxide, dry chemical to extinguish.

Storage:

Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store in a secure manner.

Disposal:

Dispose of in accordance with local, regional and international regulations.

Hazards Not Otherwise Classified:

Potential peroxide former. May be harmful or fatal if swallowed and enters airways.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances/Mixtures:

Chemical or Common Name/Synonyms

CAS Number

% by Wt.

Ethyl Lactate

97-64-3

< 90 %

Proprietary co-solvent

Proprietary

< 90 %

Inhibitor

Proprietary

< 0.10%

Note: Any chemical identity and/or exact percentage not expressly stated is being withheld as a trade secret or is due to batch variation.

4. FIRST-AID MEASURES

Description of Necessary Measures:

Eye Contact: If in eyes: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention.

Skin Contact: If on skin: Flush skin with plenty of water while removing contaminated clothing and shoes. Do not reuse clothing or shoes until cleaned. If irritation develops or persists, get medical attention. Wash with soap and water.

Inhalation: If inhaled: Remove to fresh air. Get medical attention if breathing becomes difficult or respiratory irritation occurs.

Ingestion: If swallowed: Call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

Most Important Symptoms/Effects, Acute and Delayed:

Eye Contact: Causes mild to moderate irritation. May cause: pain. tearing. redness. swelling. stinging.

Skin Contact: Causes mild to moderate irritation. Symptoms may include: itching. Prolonged and repeated contact with skin can cause defatting and drying of the skin which may result in skin irritation and dermatitis.

Skin Absorption: No data available.

Inhalation: May cause moderate irritation. May irritate: respiratory tract. May cause: shortness of breath. Aspiration of liquid may cause lung damage.

Ingestion: May cause mild to severe irritation. May cause irritation of the: mucous membranes. Aspiration can result in severe lung damage or death.

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Indication of Immediate Medical Attention and Special Treatment Needed: None.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Water fog. Carbon dioxide. Dry chemical. DO NOT use a solid stream of water directly on the fire as the water may spread the fire to a larger area.

Specific Hazards Arising from the Chemical:

Fire and Explosion Hazards: COMBUSTIBLE LIQUID. Vapors are heavier than air. Vapors may settle in low or confined areas, or travel long distances along the ground or surface to an ignition source where they may ignite, flashback, or explode. Keep away from heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment). Contact with strong oxidizing agents may cause fire. Rags soaked in solvent can present a fire hazard and should be stored in UL listed or Factory Mutual approved, covered containers. Improperly stored rags, under certain conditions can lead to spontaneous combustion. Forms peroxides of unknown stability if material becomes uninhibited. Violent steam generation or eruption may occur upon application of direct water stream to hot and burning liquids.

Hazardous Combustion Products: Carbon oxides.

Special Protective Equipment and Precautions for Fire-Fighters: Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers and disperse vapors.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, Emergency Procedures: COMBUSTIBLE LIQUID. Eliminate all sources of ignition. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit.

Methods and Materials for Containment and Clean Up: Contain spill, place into drums for proper disposal. Soak up residue with non-flammable absorbent material. DO NOT use sawdust or other cellulose-type material. Place in non-leaking containers for immediate disposal. Flush remaining area with water to remove trace residue and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. Empty containers retain product residue (vapor, dust, or liquid) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other source of ignition. They may explode and cause injury or death. Use non-sparking tools and equipment.

Conditions for Safe Storage, Including any Incompatibilities: COMBUSTIBLE LIQUID. Store in a cool, well-ventilated area away from all sources of ignition and out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Static electricity may accumulate and create a fire hazard. Ground fixed equipment. Bond and ground transfer containers and equipment. Protect containers against physical damage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA Exposure Guidelines:

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Component

No components found.

Limits

ACGIH Exposure Guidelines:

Component

Inhibitor

Limits

2 mg/m3 TWA (inhalable fraction and vapor)

Engineering Controls: General room ventilation and local exhaust are required. Use explosion-proof ventilation equipment. Maintain adequate ventilation. Avoid creating dust or mist. Do not use in closed or confined spaces.

Individual Protection Measures:

Eye/Face Protection: Wear chemical safety goggles while handling this product.

Skin Protection: Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Impervious.

Respiratory Protection: None required under normal use with adequate ventilation. If exposure limits are exceeded, wear: NIOSH-Approved air purifying respirator. NIOSH-Approved self-contained breathing apparatus. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

Other Protective Equipment: Eye-wash station. Safety shower. Rubber apron. Chemical safety shoes. Protective clothing.

General Hygiene Conditions: Wash with soap and water before mealtimes and at the end of each work shift. Good manufacturing practices require gross amounts of any chemical be removed from skin as soon as practical, especially before eating or smoking. Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.

Color: Clear. Colorless.

Odor: Mild ester odor.

Odor Threshold: N.D.

pH: 4.8 (10% solution)

Freezing Point (deg. F): N.D.

Melting Point (deg. F): N.D.

Initial Boiling Point: 300 °F

Flash Point: 133 °F

Flash Point Method: ASTM D 93

Evaporation Rate (nBuAc = 1): 0.14

Flammability (solid, gas): N.D.

Lower Explosion Limit: N.A.

Upper Explosion Limit: N.A.

Vapor Pressure (mm Hg): 0.54 @ 68 °F

Vapor Density (air=1): 4.6

Specific Gravity: 0.990 @ 25 °C

Solubility in Water: Partially

Partition Coefficient (n-octanol/water): N.D.

Autoignition Temperature: N.D.

Decomposition Temperature: N.D.

Viscosity: N.D.

% Volatile (wt%): 100

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VOC (g/l): 990
VOC (lbs/gal): 8.31
Fire Point: N.D.

10. STABILITY AND REACTIVITY

Reactivity: No data available.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur under normal conditions.

Conditions to Avoid: Avoid contact with heat, sparks, electric arcs, other hot surfaces, and open flames. Avoid other ignition sources. Avoid excess exposure to air. Do not allow to evaporate to near dryness. Do not distill to near dryness. Forms peroxides of unknown stability if material becomes uninhibited.

Incompatible Materials: Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products: Carbon monoxide. Carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Routes of Exposure: Eyes. Skin. Inhalation. Ingestion.

Symptoms/Effects: Acute, Delayed and Chronic:

Eye Contact: Causes mild to moderate irritation. May cause: pain. tearing. redness. swelling. stinging.

Skin Contact: Causes mild to moderate irritation. Symptoms may include: itching. Prolonged and repeated contact with skin can cause defatting and drying of the skin which may result in skin irritation and dermatitis.

Skin Absorption: No data available.

Inhalation: May cause moderate irritation. May irritate: respiratory tract. May cause: shortness of breath. Aspiration of liquid may cause lung damage.

Ingestion: May cause mild to severe irritation. May cause irritation of the: mucous membranes. Aspiration can result in severe lung damage or death.

Numerical Measures of Toxicity:

<u>Component</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Inhalation LC50</u>
Ethyl Lactate	Rat: > 2000 mg/kg	Rat: > 5000 mg/kg	No Data
Proprietary co-solvent	Rat: 4309 mg/kg	Rabbit: 4080 mg/kg	6H Rat: > 998 ppm
Inhibitor	Rat: 890 mg/kg	No Data	No Data

Acute Toxicity Estimate (ATE):

Oral: 6965 mg/kg

Cancer Information:

This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA.

Medical Conditions Aggravated by Exposure to Product: Eye disorders. Respiratory system disorders.

Other: None known.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: No data available.

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Chemical Fate Information: This product is completely biodegradable.

13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number: D001

Disposal Method: Dispose of in a permitted hazardous waste management facility following all local, state and federal regulations. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition.

14. TRANSPORT INFORMATION

DOT (Department of Transportation):

Identification Number: NA1993

Proper Shipping Name: Combustible Liquid, n.o.s. (Ethyl Lactate, Ethyl 3-Ethoxypropionate)

Hazard Class: Combustible Liquid

Packing Group: III

Note: In containers of 119 gallons capacity or less this product is not regulated by the DOT. Label/Placard: exception 173.150 (f) applies.

15. REGULATORY INFORMATION

TSCA Inventory Status: This product or all components of this product are listed on the EPA/TSCA Inventory of Chemical Substances.

SARA Title III Section 311/312 Category Hazards:

<u>Immediate (Acute)</u>	<u>Delayed (Chronic)</u>	<u>Fire Hazard</u>	<u>Pressure Release</u>			<u>Reactive</u>	
Yes	No	Yes	No			No	
Regulated Components:	<u>CAS</u>	<u>CERCLA</u>	<u>SARA</u>	<u>SARA</u>	<u>U.S.</u>	<u>WI</u>	<u>Prop</u>
Component	Number	RQ	EHS	313	HAP	HAP	65

No components found.

***Prop 65 - May Contain the Following Trace Components:**

Ethyl Acrylate

16. OTHER INFORMATION

Hazard Rating System

Health: 2

Flammability: 2

Reactivity: 1

NFPA Rating System

Health: 2

Flammability: 2

Reactivity: 0

Special Hazard: None

SDS Abbreviations

N.A. = Not Applicable

N.D. = Not Determined

HAP = Hazardous Air Pollutant

VOC = Volatile Organic Compound

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C = Ceiling Limit

N.E./Not Estab. = Not Established

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The data in this Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which BioBrands, LLC. assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.