

SAFETY DATA SHEET

BIOSOL 90

SECTION 1- PRODUCT IDENTIFICATION

PRODUCT NAME : BIOSOL 90
SYNONYMS : Product is a mixture: No synonyms are available.
PRODUCT USE : Flammable Material
SUPPLIER : WESMAR CO. INC.
SUPPLIER'S ADDRESS : 5720 204TH ST SW, LYNNWOOD, WA 98036
(206) 783-5344
EMERGENCY RESPONSE PHONE NUMBER : PERS: 1-800-633-8253



SECTION 2 – HAZARD IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS U.S. – CLASSIFICATION : H302 Harmful if swallowed.
H315 Causes skin irritation
H319 Causes serious eye irritation

LABEL ELEMENTS : **GHS – US HAZARD PICTOGRAMS** The product is classified and labeled according to the Globally Harmonized System (GHS).

HAZARD PICTOGRAMS :



SIGNAL WORD : WARNING

HAZARD STATEMENTS (GHS-US)

: H226 Flammable liquid and vapor
: H303 May be harmful if swallowed.
: H315 Causes skin irritation.
: H317 May cause an allergic skin reaction
: H319 Causes serious eye irritation.
: H400 Very toxic to aquatic life.

PRECAUTIONARY STATEMENTS (SGS-US)

PREVENTION : P101 If medical advice is needed, have product container or label at hand.
: P102 Keep out of reach of children.
: P103 Read label before use.
: P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking.
: P233 Keep container tightly closed.
: P240 Ground/bond container and receiving equipment.
: P241 Use explosion proof electrical/ventilation/light...equipment
: P242 Use only non-sparking tools.
: P243 Take precautionary measures against static discharge.
: P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
: P264 Wash skin and contaminated clothing thoroughly after handling.
: P270 Do not eat, drink or smoke when using this product.
: P271 Use only outdoors or in a well ventilated area.
: P280 Wear suitable protective gloves/protective clothing/eye protection/face protection.

RESPONSE : P305+P351 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
+P338

SAFETY DATA SHEET

BIOSOL 90

- : P337+P313 If eye irritation persists, get medical attention.
 - : P303+P361 IF ON SKIN: Remove/Take off immediately all contaminated clothing.
 - +351 Rinse skin with water/shower.
 - : P304+P340 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable to breathing.
 - : P337+P313 If eye irritation persists: Get medical advice/attention.
 - : P403+P233 Store in a well ventilated place. Keep container tightly closed.
 - P403+P235 Store in a well ventilated place. Keep cool.
 - : P405 Store locked up.
 - : P501 Dispose of contents/container in accordance with local/regional/national/international regulations
- STORAGE**
- DISPOSAL**
- OSHA HAZARDS** : D-Limonene: Combustible Liquid, Target Organ Effect, Skin Sensitizer, Irritant
- TARGET ORGANS** : Not applicable.
- : Not applicable.
- CLASSIFICATION SYSTEM** : NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme.
- NFPA RATINGS (SCALE 0-4)** : Health = 2, Fire = 0, Reactivity = 0
- HMIS RATINGS (SCALE 0-5)** : Health = 2, Fire = 0, Reactivity = 0

CLASSIFICATION SYSTEM: NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme.

NFPA ratings (scale 0-4): Health = 2, Fire = 2, Reactivity = 0

HMIS ratings (scale 0-5): Health = 2, Fire = 2, Reactivity = 0

SECTION 3 – COMPOSITON/INFORMATION ON INGREDIENTS

- CHEMICAL CHARACTERISTIC** : Mixtures
- DESCRIPTION** : Mixture of the substances listed below with nonhazardous additions.

COMPONENT	PERCENT	CAS #	EC #	GHS CLASS
D-Limonene (Citrus Terpenes)	> 80	5989-27-5	227-813-5	Flam Liq Cat 3, Acute Tox Oral Cat 5, Skin Irrit Cat 2, Eye Irrit Cat 2A, Skin Sens Cat 1, Acute Tox Aquatic Cat 1
Alcohol Ethoxylate	5-10	127087-87-0	500-315-8	Eye Dam Cat 1

Irrit = Irritation, Cor = Corrosive, Dam = Damage, Cat = Category, Tox = Toxic, Sens = Sensitisation, Flam = Flammable.

SECTION 4 – FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

- GENERAL** : If you feel unwell, seek medical advice. Show the label where possible. Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area
- EYE CONTACT** : Immediately flush eyes with low pressure water for at least 15 minutes. Hold eyelids open to ensure adequate flushing. Remove contact lenses, if present and easy to do so. Continue rinsing. If irritation persists, get immediate medical attention.
- SKIN CONTACT** : Remove contaminated clothing and shoes. Wash affected skin area with soap and water. If irritation persists, get immediate medical attention. Wash contaminated clothing before reuse.
- SWALLOWING (INGESTION)** : If ingested, dilute swallowed material by drinking water. **DO NOT INDUCE VOMITING.** If vomiting occurs spontaneously, keep airway clear and have victim lean forward to prevent aspiration. Give more water when vomiting stops. Never give anything by mouth to an unconscious person. Get immediate medical attention.

SAFETY DATA SHEET

BIOSOL 90

- INHALATION** : Remove to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.
- OTHER INSTRUCTIONS** : Rescue personnel must wear appropriate protective equipment during removal of victims from contaminated areas. Treat symptomatically and supportively.

SECTION 5 – FIRE FIGHTING MEASURES

- EXTINGUISHING MEDIA** : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- CONDITIONS OF FLAMMABILITY** : Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat, sparks, open flames and hot surfaces. No smoking.
- SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS** : Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Keep unopened containers cool by spraying with water.
- FURTHER INFORMATION** : Use water spray to cool unopened containers.
- HAZARDOUS COMBUSTION PRODUCTS** : Carbon oxides

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT & EMERGENCY PROCEDURES** : Do not inhale vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Restrict access to keep out unauthorized or unprotected personnel. Wear protective equipment. Avoid inhalation and direct contact.
- ENVIRONMENTAL PROCEDURES METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP** : Keep spilled material away from sewage/drainage systems and waterways.
- : All clean-up personnel must be properly trained. Confine the spill and remove incompatible materials and ignition sources. Ensure adequate ventilation. Secure the source of the leak if conditions are safe. Collect with an electrically protected vacuum cleaner or by wet-brushing and place waste in an appropriate container for disposal. Use care during clean-up to avoid exposure to the material and injury from broken containers.

SECTION 7 – HANDLING AND STORAGE

- PRECAUTIONS FOR SAFE HANDLING** : Do not get on skin or in eyes. Do not inhale vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge.
- ENVIRONMENTAL PRECAUTIONS** : Stop leak. Contain spill if possible and safe to do so. Prevent product from entering drains.
- CONDITIONS FOR SAFE STORAGE** : Keep container tightly closed in a cool, dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Protect containers from heat, physical damage, ignition sources and incompatible materials. Have emergency equipment for fires and spills readily available.



SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

- TLV (THRESHOLD LIMIT VALUE)** : The TLV in section in section III is the ACGIH/TLV-TWA (threshold limit value/time

SAFETY DATA SHEET

BIOSOL 90

weighted average concentration for an eight hour work day). The STEL is the short term exposure limit and the (Ceil) is the ceiling limit.

COMPONENT	OSHA PEL – TWA	ACGIH – TLV	ACGIH – STEL
D-Limonene (Citrus Terpenes)	Not Established	Not Established	Not Established
Alcohol Ethoxylate	Not Established	Not Established	Not Established

- EYE PROTECTION** : Use chemical safety goggles and/or a full face shield where splashing is possible. Use equipment approved by appropriate government standards, such as NIOSH (US) or EN166 (EU) Maintain eye wash fountain and quick-drench facilities in work area.
- SKIN PROTECTION** : Wear impervious, flame retardant, antistatic protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
- RESPIRATORY PROTECTION** : Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
- HAND PROTECTION** : Handle with gloves. Gloves must be inspected prior to use. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
- APPROPRIATE ENGINEERING CONTROLS** : General room or local exhaust ventilation is usually required to meet exposure limit(s). Electrical equipment should be grounded and conform to applicable electrical code.
- ADDITIONAL MEASURES** : Emergency eyewash and safety shower facilities should be available in the immediate work area.
- REQUIRED WORK/HYGIENE** : Wash hands thoroughly after handling. Keep away from all food stuffs, beverages and feed. Do not eat, drink or smoke in work area.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

- APPEARANCE** : Mostly clear colorless gel with citrus odor.
- ODOR** : Mild odor
- ODOR THRESHOLD** : Not available
- PH** : N/A
- MELTING POINT/FREEZING POINT** : Not available
- BOILING POINT** : Approx. 212° F.
- FLASH POINT** : 118°F (48°C) closed cup.
- EVAPORATION RATE** : Not available
- FLAMMABILITY** : Combustible liquid. By air or international: Flammable Liquid.
- LOWER FLAMMABILITY LIMIT** : 0.7 % (V)
- UPPER FLAMMABILITY LIMIT** : 6.1 % (V)
- VAPOR PRESSURE** : Not available
- VAPOR DENSITY (AIR=1)** : Not available
- RELATIVE DENSITY** : 0.84
- SOLUBILITY IN WATER** : Soluble in water
- PARTITION COEFFICIENT n-OCTANOL/WATER** : Not available
- AUTOIGNITION TEMPERATURE** : Not available
- DECOMPOSITION TEMPERATURE** : Not available

SAFETY DATA SHEET

BIOSOL 90

SECTION 10 – STABILITY AND REACTIVITY

STABILITY	:	Stable under recommended storage conditions.
HAZARDOUS CONDITIONS TO AVOID	:	Heat, flames, and sparks. Extreme temperatures and direct sunlight.
INCOMPATIBLE MATERIALS	:	Strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS	:	Carbon oxides are expected to be, under fire conditions, the primary hazardous decomposition products.

SECTION 11 – TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION	:	D-Limonene (Citrus Terpenes)
ACUTE TOXICITY	:	LD50 Oral (rat): >5000 mg/kg. LD50 Dermal (rabbit): >5,000 mg/kg, RD50 Inhalation (mice): > 1,000 mg/kg.
IRRITATION	:	Prolonged or repeated exposure can cause drying or dermatitis of skin.
BIOACCUMULATION	:	No appreciable bio-concentration is expected in the environment.
CARCINOGENICITY	:	This product is not classified as a carcinogen by OSHA, IARC, ACGIH or NTP.
TOXICOLOGICAL INFORMATION	:	Ethoxylated Alcohol
ACUTE TOXICITY	:	LD50 Oral (rat): 16,000 mg/kg,
INHALATION LC50	:	No data available
DERMAL LD50	:	LD50 Dermal (rabbit): 4,490 mg/kg.
PRIMARY SKIN IRRITATION	:	Slight irritation.
PRIMARY EYE IRRITATION	:	No data available.
CARCINOGENICITY	:	This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA.

SECTION 12 – ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION	:	D-Limonene (Citrus Terpenes)
ECOTOXICITY	:	There is no information available at this time for this product. However, a spill may produce significant toxicity to aquatic organisms and ecosystems. Some studies have shown that certain bacteria and fungi have the ability to degrade citrus terpenes, decreasing their toxicity to fish. When spilled, this product may act as an oil, causing a film, sheen, emulsion or sludge at or beneath the surface of a body of water
MOBILITY	:	Citrus Terpenes volatilize rapidly.
PERSISTENCE AND DEGRADABILITY	:	Readily biodegradable.
BIOACCUMULATIVE POTENTIAL	:	Bio-concentration is not expected to occur.
ECOLOGICAL INFORMATION	:	Ethoxylated Alcohol
ECOTOXICITY	:	Not available.
PERSISTENCE AND DEGRADABILITY	:	No data available.
BIOACCUMULATIVE POTENTIAL	:	No data available.

SECTION 13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL	:	This product must be disposed of in accordance with Federal, state and local environmental regulations. Discarded materials may be considered hazardous waste due to pH/corrosivity. It is the responsibility of the product user to determine at the time of disposal whether a material containing, or derived from this product, should be classified as a hazardous waste.
-----------------------	---	--

SAFETY DATA SHEET

BIOSOL 90

SECTION 14 – TRANSPORTATION INFORMATION

DOT/IMDG/ IATA PROPER SHIPPING NAME	: UN-2319, TERPENE HYDROCARBONS, N.O.S. 3, PG-III (When shipped by air or international)
HAZARD CLASS AND LABEL	: 3 (Flammable Liquid)(When shipped by air or international)
UN NUMBER	: UN-2319 (When shipped by air or international)
PACKAGING GROUP	: PG - III (when shipped air or international)
EPA REPORTABLE QUANTITY (RQ)	: Not Applicable.
MARINE POLLUTANT	: D-limonene: Dipentene,
EMERGENCY RESPONSE GUIDE	: ERG-128

SECTION 15 – REGULATORY INFORMATION

U.N. GHS CLASSIFICATION & LABELING INFORMATION: See Section 2 for GHS Hazard Information.

U.S. FEDERAL REGULATORY INFORMATION:

LISTED CARCINOGEN	: Not listed.
TSCA STATUS	: The ingredients of this product are listed in TSCA inventory (40CFR 710.)
SARA SECTION 302	: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA SECTION 313	: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
CERCLA	: No chemicals in this material with known CAS numbers are subject to the reporting requirements of CERCLA.
NFPA HEALTH	: 2
NFPA FLAMMABILITY	: 2
NFPA REACTIVITY	: 0

EUROPEAN UNION REGULATORY INFORMATION:

EC CLASSIFICATION	: Flammable, Irritant
DSD/DPD RISK (R) PHRASES	: R22: Harmful if swallowed. R36: Irritating to skin.
DSD/DPD SAFETY (S) PHRASES	: S2: Keep out of reach of children. S7: Keep container tightly closed. S16: Keep away from sources of ignition – No smoking S24/25: Avoid contact with eyes and skin. S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/S37/39: Wear suitable protective clothing, gloves and eye/face protection. S45: In case of accidents or if you feel unwell, seek medical advice immediately. Show label where possible. S61: Avoid release to the environment. S62: If swallowed, do not induce vomiting. S64: If swallowed, rinse mouth with water if victim is conscious.
DSD/DPD HAZARD SYMBOL	: F: Flammable, Xi: Irritant



CANADIAN REGULATORY INFORMATION:

SAFETY DATA SHEET

BIOSOL 90

WHMIS CATEGORY : B3: Flammable Liquid

: D2B: Materials that cause other toxic effects (TOXIC).

DOMESTIC SUBSTANCES LIST (DSL) : Listed

INGREDIENT DISCLOSURE LIST : Listed



SECTION 16 – OTHER INFORMATION

DISCLAIMER : The information contained herein has been compiled from sources believed to be reliable and accurate to the best of our knowledge at this date. It is provided without warranty, expressed or implied, as to the results of use of this information or to the product to which it relates. Wesmar Co. assumes no responsibility for injury to any person or property resulting from any use of the material. Each user assumes the risk in their use of this product and should review the data and recommendations in the specific context of their intended use.

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act.

EINECS : European Inventory of Existing Commercial Chemical Substances

IMDG : International Maritime Code for Dangerous Goods

IARC : International Agency for Research on Cancer

IATA : International Air Transportation Association

ACGIH : American Conference of Governmental Industrial Hygienists

NFPA : National Fire Protection Association (USA)

NTP : National Toxicology Program

SARA : Superfund Amendments and Reauthorization Act

TSCA : Toxic Substances Control Act

HMIS : Hazardous Materials Identification System (USA)

WHMIS : Workplace Hazardous Materials Information System

LC50 : Lethal concentration, 50 percent

LD50 : Lethal dose, 50 percent

STOT : Systemic Target Organ Toxicity

DATE PREPARED : JAN 12, 2011

DATE REVISED : JAN 12, 2014