SAFETY DATA SHEET
E-Mulse 3

Date Issued: October 4, 2017
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Section 1: PRODUCT AND COMPANY IDENTIFICATION

Manufacturer: Ethical Solutions, LLC
Address: 177 Governor's Hwy, South Windsor, CT 06074
Phone Number: (860) 757-3788

24 Hour EMERGENCY CONTACT: **ChemTel:** 1-800-255-3924

Product Name: E-Mulse 3

Section 2: HAZARDS IDENTIFICATION

Emergency Overview

Appearance/Odor: Yellow to amber, slightly viscous with citrus odor.

Product is combustible.

Stability: Product is stable under normal conditions.

Slippery when spilled.

Potential Health Effects: See Section 11 for more information.

Likely Routes of Exposure: Eye contact, skin contact, inhalation.

Eye: Causes moderate to severe irritation.
Skin: May cause slight redness. Prolonged or repeated exposure may cause drying of the skin.
Inhalation: May cause nose, throat, and respiratory tract irritation, coughing, headache.
Ingestion: Not likely to be toxic, but may cause vomiting, headache, or other medical problems.
Medical Conditions Aggravated By Exposure: May irritate the skin of people with pre-existing skin conditions.

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC, or NTP.

OSHA Regulator Status
This material is combustible, which is defined as having a flash point between 100°F (37.8°C) and 200°F (93.3°C)

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

	Percent by wt.	CAS
Citrus Terpenes	10-40	94266-47-4
Non-ionic Surfactant	10-40	N/A
Non-ionic Surfactant	10-40	N/A
Non-ionic Surfactant	10-40	N/A

Section 4: FIRST AID MEASURES

Eye Contact:
Flush with water for at least 15 minutes. If irritation persists, seek medical attention.

Skin Contact:
Wash affected area with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing. If irritation develops, seek medical attention.

Inhalation:

Move to fresh air immediately. If breathing is difficult or discomfort persists, seek medical attention.

Ingestion:
Rinse mouth with water. Dilute by drinking 1 or 2 glasses of water. Do not induce vomiting. Seek medical attention immediately. Do not administer anything by mouth to an unconscious person.

Notes to Medical Doctor:
Direct contact may be minimally irritating. Treatment is by dilution and is symptomatic and supportive.

Section 5: FIRE FIGHTING MEASURES

Flash Point (Method): N/A **Explosion Limits**: Upper: N/A Lower: N/A

Suitable Extinguishing Media:
Carbon dioxide, foam, or dry chemical. Caution: Carbon dioxide will displace air in confined spaces and may create an oxygen deficient atmosphere.

Protection of Firefighters:
Vapors may be irritating to eyes, skin and respiratory tract. Firefighters should wear self-contained breathing apparatus (SCBA) and full fire-fighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protection recommended in Section 8. Product is slippery when spilled. Isolate the hazard area. Deny entry to unnecessary and unprotected personnel.

Environmental Precautions: Keep out of drains, sewers, ditches, and waterways.

Methods for Containment: Dike spill area and cap leaking containers as necessary to prevent further spreading of spilled material. Absorb spilled liquid with suitable material.

Methods for Clean Up: Eliminate all ignition sources. Use equipment rated for use around combustible materials. Oil-soaked rags may spontaneously combust; place in appropriate disposal container.

Other Information: There are no special reporting requirements for spills of this material.

Section 7: HANDLING AND STORAGE

Handling
Keep away from heat, sparks, and flame. Open container slowly to release pressure caused by temperature variations. Do not allow this material to come in contact with eyes. Avoid prolonged contact with skin. Use in well-ventilated areas. Do not breathe vapors. As with any chemical, employees should thoroughly wash hands with soap and water after handling this material

Storage

Product may be packaged in phenolic-lined, steel containers or fluorinated plastic containers. Store in well-ventilated area. Storage temperature should not exceed flashpoint for extended periods of time. Keep container closed when not in use. Air should be excluded from partially-filled containers by displacing with nitrogen or carbon dioxide. Do not cut, drill, grind, or weld on or near this container; residual vapors may ignite.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Citrus Terpenes	8h TWA=30ppm (AIHA Standard)
Nonionic Surfactant	N/E (N/E - Not Established)
Nonionic Surfactant	N/E

Nonionic Surfactant N/E

Engineering Controls:
Provide ventilation to minimize the release of vapors and mist into the work environment. Spills should be minimized or confined to prevent release from work area. Remove contaminated clothing immediately and wash before reuse. Keep away from sparks and flames.

Eye/Face Protection:
Wear chemical splash-type safety glasses or goggles. Use full face mask if severe splashing is expected during use.

Skin Protection:
Liquid proof neoprene gloves are recommended. Nitrile gloves are adequate. Wear boots, apron, or bodysuits as necessary.

Respiratory Protection:
Not normally required. If adequate ventilation is unavailable, use NIOSH approved air-purifying respirator with organic vapor cartridge or canister.

General Hygiene Considerations:
As with any chemical, wash hands thoroughly after handling. Have eyewash facilities immediately available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Color: Yellow to amber
Physical State: Liquid
Specific Gravity: 0.972 to 0.984 @ 77ºF (25ºC)
Flash Point: 130°F (54.4°C)
Odor: Citrus odor.
Boiling Point: 212ºF (100ºC)
Vapor Pressure: <2mmHg @ 68°F (20°C)
Solubility in Water: Soluble.
Volatile Organic Compound (VOC) Content: <10 to 40% by volume.

Note: These specifications represent a typical sample of this product, but actual values may vary. Certificates of Analysis and Specification Sheets are available upon request.

Section 10: STABILITY AND REACTIVITY

Stability: Stable.

Conditions to Avoid: Keep away from heat, sparks, flames, and contamination.

Incompatible Materials: Strong oxidizing agents and strong acids, including acidic clays, peroxides, halogens, vinyl chloride, and iodine pentafluoride.

Hazardous Decomposition Products: Oxides of citrus terpenes, which can result from improper storage and handling, are known to cause skin sensitization.

Possibility of Hazardous Reactions: BHT, an antioxidant, has been added to prevent oxidation. Avoid long-term exposure to air. If storing partially-filled container, fill headspace with an inert gas such as nitrogen or carbon dioxide

Section 11: TOXICOLOGICAL INFORMATION

Acute Effects
Citrus terpenes have been shown to have low oral toxicity (LD50>5 g/kg) and low dermal toxicity (LD50> 5g/kg) when tested on rabbits. Citrus terpenes also showed low toxicity by inhalation (RD50>1 g/kg) when tested on mice. Product may be a skin and eye irritant. Inhalation may cause irritation of the nose, throat, and respiratory tract.

Chronic Effects
This product is not classified as a carcinogen by OSHA, IARC, or NTP. This product has not been shown to produce genetic changes when tested on bacterial or animal cells. This product does not contain known reproductive or developmental toxins. Prolonged or repeated exposure can cause drying or dermatitis of skin. Improper storage and handling may lead to the formation of a possible skin sensitizer.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: N/A

Persistence/Degradability: Product is expected to be readily biodegradable.

Bioaccumulation/Accumulation: No appreciable bioconcentration is expected in the environment.

Mobility in Environment: Citrus terpenes volatilize rapidly.

Section 13: DISPOSAL CONSIDERATIONS

Disposal:
Incinerate or dispose of in accordance with Local, State, and Federal Regulations. Taking regulations into consideration, waste may be incinerated or handled through EPA Spill Control Plan via landfill or dilution. Empty containers must be triple-rinsed prior to disposal. Oil soaked rags should be disposed of properly to prevent spontaneous combustion.

Section 14: TRANSPORT INFORMATION

US DOT Shipping Classification
Proper Shipping Name: Terpene Hydrocarbons, N.O.S.
Hazard Class: 3
I**dentification No.:** UN2319
Packing Group: III
Label/Placard: Exception §173.150(f) applies.

TDG Status: Hazardous
IMO Status: Hazardous
IATA Status: Hazardous

The listed transportation classification does not address regulatory variations due to changes in package size, mode of shipment, or other regulatory descriptions.

Section 15: REGULATORY INFORMATION

Global Inventories
The components of this product are included in the following inventories:
USA (TSCA)
Canada (DSL)
Australia (AICS)
Korea (KECL)
Philippines (PICCS)

Proposition 65: California Safe Drinking Water and Toxic Enforcement Act of 1986
This product is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to the proposition.

Section 16: OTHER INFORMATION

NFPA 704: National Fire Protection Association
Health – 1 Fire – 2 Reactivity – 0

Legend
OSHA – United States Occupational Health and Safety Administration
IARC – International Agency for Research on Cancer
NTP – National Toxicology Program
NIOSH – National Institute for Occupational Safety and Health
EPA – United States Environmental Protection Agency

Caution: The user should conduct his/her own experiments and establish proper procedures and control before attempting use on critical parts.

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