Material Safety Data Sheet

Date Prepared July 7, 2010, Revised August 12, 2013

SECTION 1: PRODUCT IDENTIFICATION

Product Name: **Lythic SPD Protector, Part B**

Distributor: Lythic Solutions, Inc.
PO Box 5028
Vancouver, WA 98668

Phone 888-598-4421

HMIS Codes:

Health Hazard	Fire Hazard	Physical Hazard
2	1	1

SECTION 2: MATERIAL COMPOSITION INFORMATION

		APPLICABLE EXPOSURE LIMITS (TWA)		
Ingredient	CAS #	OSHA	ACGIH	NIOSH
Proprietary Ingredient	Not Established	Not Established as a Compound	Not Established as a Compound	N/A
Poly (oxy (methyl-1, 2ethanediyl), alpha -(2-aminomethylethyl)- omega-(2-aminomethylethoxy)	9046-10-0	N/A	N/A	N/A
Propan-2-ol, 1-methoxy-	107-98-2	100 ppm (360 mg/m^3)	100 ppm (360 mg/m^3)	100 ppm (360 mg/m^3)
Benzyl alcohol	100-51-6	N/A	N/A	N/A

SECTION 3: HEALTH HAZARDS

Emergency Overview:

Components of the product may affect the nervous system
Severe eye irritant
Moderate skin irritant
Moderate respiratory irritant

Potential Health Effects:

Inhalation: May cause central nervous system effects, such as headache, nausea, dizziness, confu sion, breathing difficulties. Severe cases of overexposure can result in respiratory failure. May cause nose, throat, and lung irritation. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system.

Eye Contact: Severe eye irritation

Potential Health Effects Cont.:

Skin Contact: If absorbed through the skin, may cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties. Causes skin irritation.

Ingestion: May cause central nervous system effects, such as headache, nausea, vomiting, abdominal pain, dizziness, confusion, breathing difficulties. Severe cases of overexposure can result in respiratory failure.

Chronic Health Hazard: This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater.

Exposure Guidelines:

Target Organs: Eyes, Skin, Respiratory system, Central nervous system.

Symptoms: repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause sore throat.

Aggravated Medical Condition:

Neurological disorders, Eye disease, Skin disorders, and allergies. Asthma.

SECTION 4: FIRST AID MEASURES

General Advice: Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be Indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

Eye Contact: Rinse immediately with plenty of water for at least 15 minutes.

Skin Contact: Immediately remove contaminated clothing, and any extraneous chemical, If possible to do so without delay.

Ingestion: Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him In the recovery position. Prevent aspiration of vomit. Turn victim's head to the side.

Inhalation: If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately. Move to fresh air.

SECTION 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Alcohol-resistant foam, Carbon dioxide (C02), Dry chemical, Dry sand, Limestone powder.

Specific Hazards: May generate ammonia gas. May generate toxic nitrogen oxide gases. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from fire fighting to enter drains or water courses. Incomplete combustion may form carbon monoxide. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.

Special Protective Equipment for Firefighters: Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.

Environmental Precautions: Construct a dike to prevent spreading.

Methods for Cleanup: Approach suspected leak areas with caution. Contact Lythic Solutions, Inc. for advice. Place in appropriate chemical waste container.

Additional Advice: Open enclosed spaces to outside atmosphere. If possible, stop flow of product.

SECTION 7: HANDLING AND STORAGE

Handling: Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Avoid breathing vapors and/or aerosols. Avoid contact with eyes. Use only in well-ventilated areas. Use personal protective equipment. When using, do not eat, drink or smoke.

Storage: Do not store near acids. Keep away from Oxidizers. Keep containers tightly closed in a dry, cool and well ventilated place.

Technical Measures / Precautions: Do not store in reactive metal containers. Keep from freezing.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures: Provide readily accessible eye wash stations and safety showers. Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

Personal protective equipment

Respiratory Protection: Wear appropriate respirator when ventilation is inadequate.

Hand Protection: PVC disposable gloves. Impervious gloves. The breakthrough time of the selected glove(s) must be greater than the intended use period.

Eye Protection: Chemical resistant goggles must be worn.

Skin and Body Protection: Long sleeve shirts and trousers without cuffs.

Environmental Exposure Controls: Construct a dike to prevent spreading.

Special Instructions for Protection and Hygiene: Provide readily accessible eye wash stations and safety showers. Wash at the end of each workshift and before eating, smoking or using the toilet.

Propan-2-oI, 1-methoxy-	Time Weighted Average (TWA): ACGIH	100 ppm	
Propan-2-oI, 1-methoxy-	Short Term Exposure Limit (STEL): ACGIH		
Propan-2-oI, 1-methoxy-	Recommended Exposure Limit (REL): NIOSH	100 ppm	360 mg/m3
Propan-2-oI, 1-methoxy-	Short Term Exposure Limit (STEL): NIOSH	150 ppm	540 mg/m3
Propan-2-oI, 1-methoxy-	Time Weighted Average (TWA): OSHA Z1A	100 ppm	360 mg/m3
Propan-2-oI, 1-methoxy-	Short Term Exposure limit (STEL): OSHA Z1A	150 ppm	540 mg/m3
Propan-2-oI, 1-methoxy-	Time Weighted Average (TWA) Permissible Exposure Limit (PEL): US CA OEL	100 ppm	360 mg/m3
Propan-2-oI, 1-methoxy-	Short Term Exposure limit (STEL): US CA OEL	150 ppm	540 mg/m3
Benzyl alcohol	Time Weighted Average (TWA): WEEL	10 ppm	44.2 mg/m3

SECTION 9: PHYSICAL AND CHEMICAL CHARACTERISTICS

Form: Liquid

Color: White

Odor: Slight

pH: 9.8- 10.2

Water Solubility: Dispersible

Boiling Point/Range: 205 °F(96 ºC)

Flash Point: > 100 ºC

Relative Density: 1.08 (water = 1)

Vapor Pressure: 18.70 mmHg at 21 ºC

Density: 67.422 lb/ft3 (1.08 g/cm3) at 70 °F(21 ºC)

VOC Content:

Maximum VOC exclusive of water and exempt content: <10 g/l

SECTION 10: STABILITY/REACTIVITY

Stability:	Stable under normal conditions
Incompatibilities (Materials to avoid):	Sodium hypochlorite Organic acids (I.e. acetic acid, citric acid etc.) Mineral acids Incompatible with bases Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Oxidizing agents Reactive metals (e.g. sodium, calcium, zinc etc.) Materials reactive with hydroxyl compounds
Hazardous Decomposition Products:	Nitrogen oxides (NOx) Nitrogen oxide can react with water vapors to form corrosive nitric acid Chlorine Carbon monoxide Carbon dioxide (CO2) Ammonia Aldehydes Flammable hydrocarbon fragments (e.g., acetylene)

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Health Hazard

Ingestion: No data is available on the product itself.

Ingestion - Components

Poly (oxy (methyl-1,2-ethanediyl), alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy)	LD50 : 2,880 mg/kg	Species : Rat
Propan-2-ol, 1-methoxy-	LD50 : 5,700 mg/kg	Species : Rat
Benzyl alcohol	LD50 : 1,230 mg/kg	Species : Rat

Inhalation: No data is available on the product itself.

Inhalation - Components

Propan-2-o1,1-methoxy	LC50 (4 h) : 6000 ppm	Species : Rat
Benzyl alcohol	LC50 (4 h) : > 4.178 mg/lOECD Test Guideline 403	Species : Rat

Skin: No data Is available on the product Itself.

Skin - Components

Poly (oxy (methyl-1,2-ethanediyl), alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy)	LD50 : 2,980 mg/kg	Species : Rabbit
Propan-2-01,1-methoxy-	LD50 : 13,000 mg/kg	Species : Rabbit
Benzyl alcohol	LD50 : 2,000 mg/kg	Species : Rabbit

Eye Irritation/Corrosion: Severe eye irritation.

Acute dermal : Moderate skin irritation.
Irritation/corrosion

TOXICOLOGICAL INFORMATION CONTINUED

Chronic Health Hazard

Rats exposed orally to 800 mg/kg benzyl alcohol for thirteen weeks exhibited CNS depression and histopathological changes in the brain, thymus and skeletal muscles. The No Observed Adverse Effect Level (NOAEL) was 400 mg/kg. No evidence of carcinogenicity was seen in a two-year study with rats and mice.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity Effects

Aquatic toxicity: No data is available on the product itself.

Toxicity to fish - Components:

Propan-2-ol, 1-methoxy-	LC50 (96 h) : > 4,600 mg/l	Species : Golden orfe (Leuciscus idus)
Propan-2-ol, 1-methoxy-	LC50 (96 h) : 20,800 mg/l	Species : Fathead minnow (Pimephales promelas)
Benzyl alcohol	LC50 (96 h) : 10 mg/l	Species : Bluegill sunfish (Lepomis macrochirus)
Benzyl alcohol	LC50 (96 h) : 460 mg/l	Species : Fathead minnow (Pimephales promelas)

Toxicity to daphnia - Components:

Propan-2-ol, 1-methoxy-	EC50 (48 h) : > 500 mg/l	Species : Daphnia

Toxicity to algae - Components:

Benzyl alcohol	IC50 (72 h) : 700 mg/l	Species : Algae

Toxicity to other organisms: No data available

Persistence and Degradability

Mobility: No data available

Bioaccumulation: No data is available on the product itself.

Bioaccumulation - Components:

Propan-2-ol, 1-methoxy-	Negligible bioaccumulation potential.
Benzyl alcohol	Low bioaccumulation potential

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal : Dispose of container and unused contents in accordance with federal, state, and local requirements.

SECTION 14: TRANSPORT INFORMATION

DOT / IATA: Not dangerous goods. Not regulated

SECTION 15: REGULATORY INFORMATION

OSHA Hazard Communication Standard (29 CFR 1910.1 200) Hazard Class(es)
Irritant

EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification
Acute Health Hazard

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above 'de minimus' level
None

PROPOSITION 65 CALIFORNIA: This product does not contain any substances known to the State of California to cause cancer and/or reproductive toxicity.

WHMIS Hazard Classification
Toxic Material Causing Other Toxic Effects

SECTION 16: OTHER INFORMATION

Disclaimer: The facts and recommendations contained herein are based on our own research and the research of others, and are believed to be accurate. No guarantee of their accuracy is made as we cannot cover every possible application for our products, nor anticipate variations encountered in manufacturing equipment and methods. Products discussed are sold without warranty, express or implied and on the condition that purchasers shall make their own determination as to the suitability of such products for their particular purposes. Seller shall not be liable for any injury, loss, or damage, direct or consequential arising from the use or inability to use the product. Statements concerning the possible use of our products are not intended as recommendations to use our products in the infringement of any patents.