

I. PRODUCT IDENTIFICATION

PRODUCT NAME.....Lythic™ SPD Protector, Part A
 Distributed by:.....Solomon Colors, Inc.
 Emergency Phone:.....800-373-7542

Health Hazard	Fire Hazard	Reactivity	Personal Protection
1	1	0	

II. INGREDIENTS

Ingredient	CAS #	APPLICABLE EXPOSURE LIMITS		
		OSHA	ACGIH	OTHER
Epichlorohydrin and Bisphenol A	25085-99-8	None established	None established	N/A
Silica, amorphous, precipitated	7631-86-9	80mg/M3 / %SiO2	10ppm <1% crystalline silica	N/A
Water	7732-18-5	Not Established	Not Established	N/A

III. HEALTH HAZARDS

Routes of Exposure: Eye Contact, Skin Contact, Ingestion, Inhalation
 Exposure Standards: No exposure standards established for the product. Maintain contaminant concentrations in the workplace at the lowest feasible levels.
 Health Hazards: Mild transient eye irritation. No corneal injury likely. May cause allergic skin reaction in susceptible individuals. Prolonged exposure not likely to cause significant irritation. Repeated exposure may cause skin irritation. A single prolonged exposure is not likely to result in the material being absorbed through the skin in harmful amounts.
 Medical Conditions Generally Aggravated by Exposure: None known
 Carcinogens: This product contains no carcinogens in concentrations of 0.1 percent or greater as defined by OSHA, ACGIH, IARC, or other body.

IV. FIRST AID MEASURES

Eye Contact:..... Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes.
 Skin Contact: Wash affected area with soap and water. Wash clothing before reuse.
 Ingestion:..... Low in toxicity.
 Inhalation:..... Move victim to fresh air if effect occurs
 General:..... No specific antidote. Supportive care. Treatment based on judgement of the physician in re-sponse to the reactions of the patient.



V. FIRE AND EXPLOSION DATA

FLASH POINT (method)	FLAMMABILITY LIMITS	LEL	UEL
252°C (485°F) (Pensky-Martin Closed Cup)	N/A	N/A	N/A

Suitable Extinguishing Media: Ignition will give rise to a class B fire. In case of large fire use water spray, alcohol foam. In case of small fire use carbon dioxide (CO₂), dry chemical.

Special Firefighting Procedures: Firefighters should wear self contained breathing apparatus.

VI. ACCIDENTAL RELEASE MEASURES

Containment Procedures:..... (Removal of ignition sources, diking etc.) Stop the leak if possible. Ventilate the space involved. Shut off or remove all ignition sources. Construct a dike to prevent spreading (includes molten liquids until they freeze).

Methods for Cleanup: If recovery is not feasible, admix with dry soil, sand or nonreactive absorbent and place in an appropriate chemical waste container. Transfer to containers by suction, preparatory for later disposal. Place in metal containers for recovery or disposal. Flush area with water spray. Clean-up person-nel must be equipped with self contained breathing apparatus and butyl rubber protective clothing. For large spills, recover spilled material with a vacuum truck.

VII. HANDLING AND STORAGE

Handling: Avoid contact with skin or eyes. When handling, do not eat, drink, or smoke.

Storage:..... Keep in cool, dry, ventilated storage and in closed containers. Do not store in reactive metal containers. Keep from freezing.

Technical Measures / Precautions: Emergency showers and eye wash stations should be readily accessi-ble. Adhere to work practice rules established by government regulations (e.g. OSHA).

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

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.

Respiratory Protection:..... Not required under normal conditions in a well-ventilated workplace. An organic vapor respirator NIOSHA approved for organic vapors is recommended under emergency conditions.

Skin and Body Protection:..... No specific recommendations.

IX. PHYSICAL AND CHEMICAL CHARACTERISTICS

Form: Liquid

Color:..... White to yellow, semi-solid

Odor: Slight

Vapor Pressure:..... Not applicable

Vapor Density:..... Not applicable

pH:..... Not Applicable

Boiling Point:..... >100°C (>212°F)

Water Solubility:..... None

Specific Gravity:..... 1.16

X. STABILITY/REACTIVITY

Stability: Stable under normal conditions
Incompatibilities (Materials to avoid): Mineral acids (i.e. sulfuric, phosphoric, etc.)
Alkalis (i.e. Sodium or Potassium Hydroxide, etc.)
organic acids (i.e. acetic acid, citric acid, etc.)
oxidizing agents (i.e. perchlorate, nitrate, etc.)
Sodium or Calcium Hypochlorite
Product slowly corrodes copper, aluminum, zinc and galvanized surfaces
Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.
A reaction accompanied by large heat release occurs when the product is mixed with acids. Heat generated may be sufficient to cause vigorous boiling creating a hazard due to splashing or splattering of hot material.

Hazardous Decomposition Products:
(from burning, heating or reaction with other materials)..... Nitrogen oxide can react with water vapors to form corrosive nitric acid (TLV=2ppm).
Carbon monoxide
Carbon dioxide
Nitrogen Oxides & Nitric acid in a fire.
Ammonia when heated.
Irritating and toxic fumes at elevated temperatures.
The oxides of nitrogen gases (except nitrous oxide) emitted on decomposition are highly toxic.

XI. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity (LD50, rat):..... No data
Acute Dermal Toxicity (LD50, rabbit):..... No data
Acute Inhalation Toxicity (LC50, rat):..... No data
Chronic / Sub-chronic Data: Except for skin sensitization, repeated exposures to low molecular weight res-ins of the type are not anticipated to cause any significant adverse effects.

XII. ECOLOGICAL INFORMATION

Not Established / Not Available

XIII. DISPOSAL CONSIDERATIONS

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

XIV. TRANSPORT INFORMATION

DOT / IATA: Not dangerous goods. Not regulated

XV. REGULATORY INFORMATION

US FEDERAL REGULATIONS

TOXIC SUBSTANCES CONTROL ACT (TSCA): The components of this product are included on the inventory list.

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION, AND LIABILITY ACT OF 1980 (CERCLA):

Components present in this product at level which could require reporting under the statute are: NONE

SUPERFUND AMENDMENTS and REAUTHORIZATION ACT OF 1986 (SARA) TITLE III:

Section 301 – 304 require emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355. Components present in this product at a level which could require reporting under this statute are: NONE

Sections 311 – 312 require products be reviewed and applicable EPA Hazard Definitions be identified and made known.

EPA Hazard Classifications

Acute: No

Chronic Fire: No

Pressure: No

Reactive: No

Section 313 requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313).

This information must be included in all MSDS's that are copied and distributed for this material. Components present in this product at level which could require reporting under the statute are: NONE

STATE REGULATIONS

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

XV. REGULATORY INFORMATION continued

INTERNATIONAL REGULATIONS:

CANADA

DSL:..... Included on Inventory

WHMIS Hazard Classification: NONE

WHMIS Trade Secret Registry Number: NONE

WHMIS Symbols:..... NONE

EUROPEAN ECONOMIC COMMUNITY (EEC)

EINECS / ELINCS Master Inventory:..... Included on Inventory

EEC Risk (R) Phrases:..... There are no known health hazards

XVI. OTHER INFORMATION

Disclaimer: The facts and recommendations contained herein are based on our own research and the re-search of others, and are believed to be accurate. No guarantee of their accuracy is made as we can-not cover every possible application for our products, nor anticipate variations encountered in manu-facturing 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 pos-sible use of our products are not intended as recommendations to use our products in the infringe-ment of any patents.

I. PRODUCT IDENTIFICATION

PRODUCT NAME.....Lythic™ SPD Protector, Part B
 Distributed by:.....Solomon Colors, Inc.
 Emergency Phone:.....800-373-7542

Health Hazard	Fire Hazard	Reactivity	Personal Protection
2	1	1	

II. INGREDIENTS

Ingredient	CAS #	APPLICABLE EXPOSURE LIMITS		
		OSHA	ACGIH	OTHER
Silica, amorphous, precipitated	7631-86-9	80mg/M3 / %SiO2	10ppm <1% crys-talline silica	6 mg/m3
Poly (oxy (methyl-1, 2ethanediyl), alpha-(2-aminomethylethyl)-ega-(2-aminomethylethoxy)	9046-10-0	N/A	N/A	N/A
Propan-2-ol, 1-methoxy-	107-98-2	100 ppm (360 mg/m3)	100 ppm (360 mg/m3)	100 ppm (360 mg/m3)
Benzyl alcohol	100-51-6	N/A	N/A	N/A

III. 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, confusion, 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
 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.



IV. 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.

V. FIRE AND EXPLOSION DATA

Suitable Extinguishing Media:	Alcohol-resistant foam, Carbon dioxide (CO ₂), 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.

VI. 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.

VII. 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.

VIII. 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-ol, 1-methoxy-	Time Weighted Average (TWA): ACGIH	100 ppm	
Propan-2-ol, 1-methoxy-	Short Term Exposure Limit (STEL): ACGIH		
Propan-2-ol, 1-methoxy-	Recommended Exposure Limit (REL): NIOSH	100 ppm	360 mg/m ³
Propan-2-ol, 1-methoxy-	Short Term Exposure Limit (STEL): NIOSH	150 ppm	540 mg/m ³
Propan-2-ol, 1-methoxy-	Time Weighted Average (TWA): OSHA Z1A	100 ppm	360 mg/m ³
Propan-2-ol, 1-methoxy-	Short Term Exposure limit (STEL): OSHA Z1A	150 ppm	540 mg/m ³
Propan-2-ol, 1-methoxy-	Time Weighted Average (TWA)		
Permissible Exposure Limit (PEL):	US CA OEL 100 ppm 360 mg/m ³		
Propan-2-ol, 1-methoxy-	Short Term Exposure limit (STEL): US CA OEL	150 ppm	540 mg/m ³
Benzyl alcohol	Time Weighted Average (TWA): WEEL	10 ppm	44.2 mg/m ³

IX. PHYSICAL AND CHEMICAL CHARACTERISTICS

Form: Liquid

Color: White

Odor: Slight

pH: 10

Water Solubility: Dispersible

Boiling Point/Range: 205°F (96 °C)

Flash Point: > 100 °C

Relative Density: 1.08 (water = 1)

Vapor Pressure: 18.70 mmHg at 21 °C

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

X. STABILITY/REACTIVITY

Stability:

Incompatibilities (Materials to avoid): Stable under normal conditions
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 (NO_x)
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)

XI. 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) Propan-2-ol, 1-methoxy-	LD50 : 2,880 mg/kg	Species : Rat
	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-ol, 1-methoxy	LC50 (4 h) : 6000 ppm	Species : Rat
Benzyl alcohol	LC50 (4 h) : > 4.178 mg/IOECD 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) Propan-2-ol, 1-methoxy-	LD50 : 2,980 mg/kg	Species : Rabbit
Benzyl alcohol	LD50 : 13,000 mg/kg	Species : Rabbit
	LD50 : 2,000 mg/kg	Species : Rabbit

Eye Irritation/Corrosion: Severe eye irritation.

Acute dermal : Moderate skin irritation.
Irritation/corrosion

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.

XII. 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 (Leuciscus idus)	Species : Golden orfe
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

XIII. DISPOSAL CONSIDERATIONS

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

XIV. TRANSPORT INFORMATION

DOT / IATA: Not dangerous goods. Not regulated

XV. 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

XVI. OTHER INFORMATION

Disclaimer: The facts and recommendations contained herein are based on our own research and the re-search of others, and are believed to be accurate. No guarantee of their accuracy is made as we can-not cover every possible application for our products, nor anticipate variations encountered in manu-facturing 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 pos-sible use of our products are not intended as recommendations to use our products in the infringe-ment of any patents.