

MATERIAL SAFETY DATA SHEET (MSDS)



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China phosphate ester flame retardant production and export manufacturers

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Ethacure 300 (cas 106264-79-3) MSDS

Spal-Pro RS 88-SG ??A??

MATERIAL SAFETY DATA SHEET

SPAL-PRO RS 88-SG ??A??

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Spal-Pro RS 88-SG ??A??

PRODUCT DESCRIPTION: Polyol part of a two-component poured polyurethane elastomer

24 HOUR EMERGENCY TELEPHONE NUMBE Metzger McGuire Co., Inc. Chemtrec: 800-424-9300

557 Route 3-A

Bow, NH 03304

800-223-6680 www.metzgermcguire.com

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name Vt.% CAS

6-Methyl-2,4-Bis(Methylthio)Phenylene-1,3-Diamine 10-15 106264-79-3

N,N,N',N'-Tetrakis(2-Hydroxypropyl)Ethylene diamine <= 10 102-60-3

Polyether Polyol 75-85 9082-00-2

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Gray viscous liquid

IMMEDIATE CONCERNS: Irritating to eyes, skin, gastrointestinal tract, and respiratory system.

POTENTIAL HEALTH EFFECTS

EYES: May cause moderate irritation.

SKIN: May cause mild to moderate irritation.

INGESTION: Ingestion may cause irritation of the gastrointestinal tract and gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting, lethargy, or diarrhea.

INHALATION: Inhalation of vapors or mist at concentrations above the TLV can cause respiratory tract irritation. (nose, throat, lungs)

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Contact may cause moderate irritation consisting of transient redness, swelling, and mucous membrane discharge to the conjunctiva.

SKIN: Contact may cause mild irritation consisting of transient redness and/or swelling.

INGESTION: Ingestion may cause gastrointestinal discomfort.

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INHALATION: High concentrations may be irritating to in nose, throat, and lungs.

ROUTES OF ENTRY: Inhalation, skin contact, eye contact, ingestion.

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN: Remove contaminated clothing. Wash affected areas thoroughly with soap and water. Wash clothing thoroughly before reuse. Discard shoes. Get medical attention if swelling or redness occurs, or if irritation persists after being washed.

INGESTION: Do not induce vomiting. Never give anything by mouth to a drowsy or unconscious person. If the individual is conscious, rinse mouth with water. Give 1 to 2 cups of water to drink. Seek immediate medical attention.

INHALATION: Remove individual from exposure, keep warm and at rest. If respiratory irritation develops, get medical attention.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: > 300 oF (Closed Cup)

EXTINGUISHING MEDIA: Dry Chemical, Carbon Dioxide, Alcohol Foam, Water Fog or Spray. Water or foam may cause frothing if liquid is burning, but it still may be a useful extinguishing agent if carefully applied to the fire.

HAZARDOUS COMBUSTION PRODUCTS: Carbon Monoxide, Carbon Dioxide

FIRE FIGHTING PROCEDURES: Isolate fuel supply from fire. Use water spray to cool fire-exposed surfaces and containers. Avoid spreading burning liquid with water used for cooling purposes. Fire fighters should wear self-contained breathing apparatus in addition to emergency fire fighting protective clothing.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Clean up spills wearing proper personal protective equipment. (See section 8) Absorb with dry chemical absorbent, earth, sand, or any other inert material. Place in a chemical waste container.

LARGE SPILL: Create a dike or trench to contain materials. Prevent entry into waterways, sewers, basements or confined areas. Clean-up personnel should wear appropriate personal protection equipment. (see section 8) May be a slipping hazard. Absorb with dry chemical absorbent, earth, sand, or any other inert material. Place in a chemical waste container. Wash residues from area with soap and water and rinse. Contaminated water should be retained and not allowed to flow into ground or surface water.

ENVIRONMENTAL PRECAUTIONS: This product is a marine pollutant.

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SPECIAL PROTECTIVE EQUIPMENT: See Section 8. Clean-up crews should always wear Personal Protective Equipment.

COMMENT: Dispose of by any standard method of disposal in accordance with good industrial practice and in compliance with federal, state, and local environmental protection regulations.

7. HANDLING AND STORAGE

HANDLING: Wear proper personal protective equipment. Use in a well ventilated area. Avoid smoking, bare lights, or ignition sources. Avoid physical damage to containers. Practice good hygiene procedures.

STORAGE: Protect from atmospheric moisture. Keep containers sealed in order to avoid contamination. Do not reseal if contaminated. Store indoors in a cool, well-ventilated area.

STORAGE TEMPERATURE: 60 oF ?? 120 oF

SHELF LIFE: 6 months

SPECIAL SENSITIVITY: Material is hygroscopic and may absorb small amounts of atmospheric moisture.

COMMENT: See Section 10 for more information on precautions concerning storage and handling of this material.



8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

EXPOSURE LIMITS

CHEMICAL NAME OSHA PEL ACGIH TLV SUPPLIER OEL

33

ppm mg/m³

ppm mg/m ppm mg/m

6-Methyl-2,4-Bis(Methylthio)Phenylene-TWANE NE NE NE

1,3-Diamine

N,N,N',N'-Tetrakis(2-Hydroxypropyl) TWANL NL NL NL

Ethylenediamine

KEY:

NE = Not Established

NL ?? Not Listed

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields.

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SKIN: Wear impervious gloves and clothing to cover exposed skin.

RESPIRATORY: If adequate engineering controls are not feasible, an approved respirator must be worn.

WORK HYGIENIC PRACTICES: Follow good normal hygiene practices. Avoid contact with skin.

Avoid eating, drinking, or smoking while using this product. Wash hands thoroughly after use.

OTHER PROTECTIVE EQUIPMENT: Safety showers and eye wash stations are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Slightly musty

COLOR: Gray

BOILING POINT: > 300 °F

FREEZING POINT: < 32 °F

SOLUBILITY IN WATER: Partially soluble

SPECIFIC GRAVITY: 1.040 ?? 1.080 (water = 1) at 74 °F

VISCOSITY: 1350 ?? 1550 Centipoise at 74 °F

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Temperature extremes. Container contamination. Moisture.

STABILITY: Stable under recommended storage conditions.

POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: By fire: Carbon Monoxide, Carbon Dioxide,

Oxides or Nitrogen, Oxides of Sulfur.

INCOMPATIBLE MATERIALS: Moisture, strong oxidizing agents, temperature extremes.

11. TOXICOLOGICAL INFORMATION

ORAL DERMAL INHALATION

LD50 (rat) LD50 (rabbit) LC50 (rat)

6-Methyl-2,4-Bis(Methylthio)Phenylene-1,3-Diamine > 1515 mg/kg > 2000 mg/kg

N,N,N',N'-Tetrakis(2-Hydroxypropyl)Ethylenediamine 3280 mg/kg > 2000 mg/kg

EYE EFFECTS: Moderate irritant

SKIN EFFECTS: Mild to moderate irritant

CARCINOGENICITY

IARC: Not classified as a carcinogen.

NTP: Not classified as a carcinogen.

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OSHA: Not classified as a carcinogen.

ACGIH: Not classified as a carcinogen.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: This product is a marine pollutant.

COMMENTS: No testing for product as a whole.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Disposal should be in accordance with local, state, provincial or national regulations.

EMPTY CONTAINER: Empty containers should be decontaminated and either passed to an approved drum recycler or destroyed.

RCRA HAZARD CLASS: This material is not a hazardous waste under RCRA 40 CFR 261.

COMMENTS: The generation of waste should be avoided or minimized whenever possible.

Chemical waste, even small quantities, should never be poured down drains, sewers or waterways.

Refer to Section 6 for additional information.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

Not regulated for transportation in non-bulk packaging, bulk containers are regulated as:

UN3082, Environmentally Hazardous Substances, Liquid, NOS, (Di-

(methylthio)toluenediamine), 9.III.

TECHNICAL NAME: Compound Resin

AIR (CADMIATA): Not restricted

VESSEL (IMO/MDG): Ship as a marine pollutant.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Immediate, Delayed

313 REPORTABLE INGREDIENTS: This product does not contain any chemical components with known CAS numbers that exceed their de minimis reporting levels.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

No chemicals in this material with known CAS numbers are subject to the reporting

requirements of CERCLA

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TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All ingredients are on TSCA inventory.

RCRA STATUS: Not hazardous if discarded in its purchased form. However, under RCRA it is the responsibility of the product user to determine at the time of disposal whether a material containing the product or derived from the product should be classified as a hazardous waste (40 CFR 261.20-24).

OSHA HAZARD COMM RULE: This material is classified as a hazardous material under the criteria outlined in the OSHA Hazard Communication Standard (HCS) at 29 CFR 1910.1200.

16. OTHER INFORMATION

HMS RATING: Health ?? 2*, Flammability - 1, Physical Hazard - 0

HMS RATING NOTES: If present, the asterisk signifies a chronic health hazard.

Rating system: 0 = low hazard to 4 = high hazard

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KEY LEGEND INFORMATION:

ACGIH - American Conference of Governmental Industrial Hygienists

EPA - Environmental Protection Agency

IARC - International Agency for Research on Cancer

NTP - National Toxicology Program

CEL - Occupational Exposure Limit

OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limit

STEL - Short Term Exposure Limit

TLV - Threshold Limit Value

TWA - Time Weighted Average

PREPARED BY: L. Priest

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CHANGES FROM LAST VERSION: Section 1 [Product Name], Section 4 [Ingestion], Section 5 [Fire Fighting Procedures], Section 6 [Large Spill], Section 9 [Color], Section 13 [Comments], Section 15 [OSHA Hazard Comm Rule]