

Section 1 - Product and Company Identification

Hazard Label WARNING

Company Information

Johns Manville
Insulation Systems
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Emergency: 800-424-9300 (Chemtrec, In English)

Trade Names: JM Open Cell Spray Foam, Side B; JM ocSPF™

Use: Part B of a two-component open cell spray foam insulation

Section 2 - Hazards Identification

Inhalation

Irritation of the upper respiratory tract, coughing, and congestion may occur in extreme exposures. Severe irritation of the mouth, nose, and throat, as well as signs of central nervous system depression (drowsiness, dizziness, headache), may occur upon inhalation of vapors or gases.

Skin

Irritation (itching) or redness may occur.

Ingestion

This product is not intended to be ingested or eaten under normal conditions of use. If ingested, seek medical attention.

Eyes

Irritation (itching) or redness may occur.

Primary Routes of Entry (Exposure)

Inhalation, skin, and eye contact.

Target Organs

Skin, eye, lungs, central nervous system (CNS), respiratory system, kidney, liver.

Medical Conditions Aggravated by Exposure

Pre-existing chronic respiratory, skin, or eye diseases or conditions.

Section 3 - Composition/Information on Ingredients

CAS #	Component	Percent
13674-84-5	2-Propanol, 1-chloro-, phosphate (3:1)	20-30
Trade Secret	Surfactant	7-13
Trade Secret	Tertiary Amines	1-5
1704-62-7	Dimethylaminoethoxyethanol	3-7
Trade Secret	Alkanolamine	1-5
Trade Secret	Polyether Polyol	>1
7732-18-5	Water	>1

Component Information

Blowing agent in side B is water which is reacted with the MDI in part A.

General Product Description

Yellow viscous liquid with amine odor.

Section 4 - First Aid Measures

First Aid: Inhalation

Remove to fresh air. If symptoms persist contact a physician.

First Aid: Skin

Remove contaminated clothing. Wash exposed areas with soap and water. If irritation develops or persists, seek medical attention. Launder contaminated clothing before reuse.

First Aid: Ingestion

Product is not intended to be ingested or eaten. If this product is ingested, do not induce vomiting and seek medical attention immediately.

First Aid: Eyes

Flush eyes with large amounts of water until irritation subsides. If irritation persists, seek medical attention.

First Aid: Notes to Physician

Treatment for inhalation, skin contact, or ingestion should be symptomatic. Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias.

Section 5 - Fire Fighting Measures**Flash Point:** >93.3°C/>200°F**Upper Flammable Limit (UFL):** Not determined**Auto Ignition:** Not determined**Rate of Burning:** Not determined**General Fire Hazards**

CAUTION: Combustible liquid and vapor.

Keep away from heat, sparks, and flame. Material is highly volatile and readily gives off vapors which are heavier than air and may travel along the ground or be moved by ventilation and ignited by pilot lights, other flames, sparks heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Keep container closed. Use with adequate ventilation.

Extinguishing Media

Carbon dioxide (CO₂), water, water fog, dry chemical.

Fire Fighting Equipment/Instructions

Use NIOSH-approved self-contained breathing apparatus operating in the pressure demand mode and full fire fighting protective clothing. Avoid inhalation of vapors.

Method Used:**Lower Flammable Limit (LFL):** Not determined**Flammability Classification:****Section 6 - Accidental Release Measures****Containment Procedures**

Remove all sources of ignition. Evacuate and ventilate spill area. Dam spill area with sand, earth, or other suitable absorbent. Prevent entry of material into sewers, other water sources, or land areas. Wear full protective clothing and respiratory protection during clean-up as required to maintain exposures below the applicable exposure limit. Shovel absorbed material into containers in well-ventilated area.

Clean-Up Procedures

Place in closable container for disposal.

Section 7 - Handling and Storage**Handling Procedures**

Use protective equipment as described in Section 8 of this safety data sheet when handling uncontained material. Handle in accordance with good industrial hygiene and safety practices.

Storage Procedures

Warehouse storage should be in accordance with package directions, if any. Product should be kept in a cool and dry area in original packaging. Do not freeze.

Section 8 - Exposure Controls / Personal Protection**A: Component Exposure Limits**

ACGIH, OSHA, and NIOSH have not developed exposure limits for any of this product's components.

PERSONAL PROTECTIVE EQUIPMENT**Personal Protective Equipment: Eyes/Face**

Safety glasses with side shields or chemical goggles are recommended.

Personal Protective Equipment: Skin

Impervious gloves such as nitrile rubber should be used to help prevent excessive skin contact.

Personal Protective Equipment: Respiratory

A NIOSH approved respirator must be used if vapor concentrations exceed exposure limits.

Ventilation

Local exhaust or general dilution ventilation may be required to maintain exposures below the applicable exposure limits. The need for ventilation systems should be evaluated by a professional industrial hygienist, while the design of specific ventilation systems should be conducted by a professional engineer.

Section 9 - Physical & Chemical Properties

Appearance: Yellow	Odor: Amine
Physical State: liquid	pH: 8.5-10.5
Vapor Pressure: Not established	Vapor Density: Not established
Boiling Point: >149°C	Specific Gravity: 1.11-1.13
Freezing Point: <32°F/0°C	Viscosity: 165 - 180 cps @ 25°C (77°F)

Section 10 - Stability & Reactivity Information**Stability**

These products are not reactive.

Stability: Conditions to Avoid

Avoid contact with isocyanates until ready for application.

Hazardous Polymerization

Will not occur.

Section 11 - Toxicological Information**Acute Toxicity****A: General Product Information**

Vapors from this product may cause eye, respiratory and skin irritation,

B: Component Analysis - LD50/LC50**2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)**

Inhalation LC50 Rat: 5 mg/L/4H; Inhalation LC50 Rat:>17.8 mg/L/1H; Oral LD50 Rat:500 mg/kg; Dermal LD50 Rat:>5000 mg/kg; Dermal LD50 Rabbit:1230 mg/kg

Dimethylaminoethoxyethanol (1704-62-7)

Oral LD50 Rat: 2460 µL/kg; Dermal LD50 Rabbit:1410 µL/kg

Water (7732-18-5)

Oral LD50 Rat: >90 mL/kg

Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

Section 12 - Ecological Information**Ecotoxicity****A: General Product Information**

No data available for this product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity**2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)**

96 Hr LC50 Brachydanio rerio: 56.2 mg/L [static]; 96 Hr LC50 Leuciscus idus: 180 mg/L [static]; 96 Hr LC50 Pimephales promelas: 98 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 30 mg/L [static]
72 Hr EC50 Scenedesmus subspicatus: 45 mg/L; 96 Hr EC50 Selenastrum capricornutum: 4 mg/L
48 Hr EC50 Daphnia magna: 63 mg/L

Section 13 - Disposal Considerations**US EPA Waste Number & Descriptions****A: General Product Information**

This product is not expected to be a hazardous waste when it is disposed of according to the U.S. Environmental Protection Agency (EPA) under Resource Conservation and Recovery Act (RCRA) regulations. Product characterization after use is recommended to ensure proper disposal under federal and/or state requirements.

B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Section 14 - Transport Information**International Transport Regulations**

These products are not classified as dangerous goods according to international transport regulations.

Section 15 - Regulatory Information**US Federal Regulations****A: General Product Information**

SARA 311 Status. The following SARA 311 designations apply to this product: Immediate (acute) health hazard. Delayed (chronic) health hazard.

B: Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

State Regulations**A: General Product Information**

Other state regulations may apply. Check individual state requirements.

B: Component Analysis - State

None of this product's components are listed on the state lists from CA, FL, MA, MN, NJ, or PA.

A: TSCA Status

This product and its components are listed on the TSCA 8(b) inventory.

None of the components listed in this product are listed on the TSCA Export Notification 12(b) list.

B: Component Analysis - Inventory

Component	CAS #	TSCA	DSL	EINECS
2-Propanol, 1-chloro-, phosphate (3:1)	13674-84-5	Yes	Yes	Yes
Dimethylaminoethoxyethanol	1704-62-7	Yes	Yes	Yes
Water	7732-18-5	Yes	Yes	Yes

Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

WHMIS Classification

Controlled Product Classification: D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations. This SDS contains all the information required by the Controlled Products Regulations.

Section 16 - Other Information**Other Information**

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The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

Date	MSDS #	Reason
04/02/10	1094-1.0000	New JM MSDS for open cell foam
04/08/10	1094-1.0001	Edited trade name.

End of Sheet 1094