

Material Name: JM EPDM Lap Caulking

Safety Data Sheet ID: 3105B

# Section 1 - Product and Company Identification

Hazard Label DANGER
Company Information

Johns Manville Roofing Systems P.O. Box 5108 Denver, CO 80127 USA Telephone: 303-978-2000 8:00AM-5:00PM M-F

Internet Address: http://www.jm.com

Emergency: 800-424-9300 (Chemtrec, In English)

Trade Names: JM EPDM Lap Caulking

**Use:** Used for sealing the exposed edge of field fabricated EPDM membrane laps and can be used as a temporary nighttime sealant.

## Section 2 - Hazards Identification

#### **Emergency Overview**

DANGER: Extremely flammable liquid and vapor. Vapor may cause flash fire. Use water spray to cool materials in or near a fire. Fire may be difficult to extinguish. Vapors may travel, and can be ignited by a remote source.

#### Inhalation

Irritation of the upper respiratory tract (scratchy throat), coughing, and congestion may occur in extreme exposures.

#### Skin

Drying of skin, dermatitis, and blistering may occur following prolonged exposures.

#### Ingestion

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

# Eves

Irritation, redness, and burning in eyes may occur.

## **Primary Routes of Entry (Exposure)**

Inhalation, skin, and eye contact.

#### **Target Organs**

Nose (nasal passages), throat, lungs, skin, eyes

#### **Medical Conditions Aggravated by Exposure**

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

# Section 3 - Composition/Information on Ingredients

CAS#	Component	Percent
64742-89-8 Solvent naphtha (petroleum), light aliphatic		27-31
1332-58-7	Kaolin	17-21
Trade Secret	Synthetic Rubber	11-15
8052-41-3	Stoddard solvent (mineral spirits)	11-15
7631-86-9	Silica, amorphous	8-12
Trade Secret Process Oil		6-10
Trade Secret	Hydrocarbon Resin	6-10
1344-28-1	Aluminum oxide	6-10
9003-29-6	Polybutene homopolymer	3-7
1333-86-4	Carbon black	<3
9003-27-4	Polyisobutylene	1-3
14808-60-7	Crystalline silica	<1
1330-20-7	Xylenes	Proprietary

#### **General Product Description**

Black, aliphatic rubber-based sealant. Rubber odor

## **Section 4 - First Aid Measures**

## First Aid: Inhalation

If the affected person is having difficulty breathing, administer oxygen or apply artificial respiration and immediately contact a medical professional.

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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: 45°F Method Used: SETA

Upper Flammable Limit (UFL): 7%

Auto Ignition: Not determined

Rate of Burning: Not determined

Lower Flammable Limit (LFL): 0.9%

Flammability Classification: Flammable

**General Fire Hazards** 

DANGER: EXTREMELY FLAMMABLE 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.

NFPA Rating: Health = 2 Fire = 3 Reactivity = 0

#### **Hazardous Combustion Products**

Carbon monoxide, carbon dioxide, halogenated hydrocarbons, nitrogen oxides, and various hydrocarbons.

## **Extinguishing Media**

Carbon dioxide (CO<sub>2</sub>), 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.

# **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.

# **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

Kaolin (1332-58-7)

ACGIH: 2 mg/m3 TWA (respirable fraction, particulate matter containing no asbestos and < 1%

crystalline silica)

OSHA: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)

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Stoddard solvent (mineral spirits) (8052-41-3)

ACGIH: 100 ppm TWA

OSHA: 100 ppm TWA; 525 mg/m3 TWA

**Aluminum oxide (1344-28-1)** 

ACGIH: 10 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica)

OSHA: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)

Carbon black (1333-86-4)

ACGIH: 3.5 mg/m3 TWA OSHA: 3.5 mg/m3 TWA

Crystalline silica (14808-60-7)

ACGIH: 0.025 mg/m3 TWA (respirable fraction) OSHA: 0.1 mg/m3 TWA (respirable dust)

Xylenes (1330-20-7)

ACGIH: 100 ppm TWA

150 ppm STEL

100 ppm TWA; 435 mg/m3 TWA OSHA:

150 ppm STEL; 655 mg/m3 STEL

#### PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Safety glasses with side shields, chemical goggles, or a face shield is required.

**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.

Personal Protective Equipment: General

Protective equipment should be provided as necessary to prevent irritation of the throat, eyes, and skin, and to keep exposures below the applicable exposure limits identified in Section 8.

# Section 9 - Physical & Chemical Properties

Appearance: Odor: Black Rubber odor **Physical State:** Semi-liquid pH: Not applicable

Vapor Pressure: Vapor Density: 10.2 mm Hg >1 Boiling Point: 240-285°F (115.5-140.5°C) **Melting Point:** 

Solubility (H<sub>2</sub>O): Specific Gravity: 0.988 @ 77F Freezing Point: Not determined Solids Content ~59.5

**Bulk Density: Evaporation Rate:** Slower than ethyl ether 8.23 lbs/gal (liquid density)

Percent Volatile: VOC: 422 g/L (3.390 lbs/gal) EPA 40-45

protocol 24

# Section 10 - Stability & Reactivity Information

Stability

These products are not reactive.

Stability: Conditions to Avoid

Keep away from ignition sources. Do not freeze. Do not thin.

Incompatibility

Strong acids, alkalis, and oxidizing agents

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#### **Hazardous Decomposition**

May form carbon dioxide, carbon monoxide, halogenated hydrocarbons, nitrogen oxides, various hydrocarbons.

#### **Hazardous Polymerization**

Will not occur.

# Section 11 - Toxicological Information

## Component Analysis - LD50/LC50

# Solvent naphtha (petroleum), light aliphatic (64742-89-8)

Oral LD50 Rat: 5000 mg/kg; Dermal LD50 Rabbit: 3000 mg/kg

## Silica, amorphous (7631-86-9)

Oral LD50 Rat: >5000 mg/kg; Dermal LD50 Rabbit: >2000 mg/kg

#### **Aluminum oxide (1344-28-1)**

Oral LD50 Rat: >5000 mg/kg

### Carbon black (1333-86-4)

Oral LD50 Rat: >15400 mg/kg; Dermal LD50 Rabbit: >3 g/kg

#### Crystalline silica (14808-60-7)

Oral LD50 Rat: 500 mg/kg

#### Xylenes (1330-20-7)

Inhalation LC50 Rat: 5000 ppm/4H; Oral LD50 Rat: 4300 mg/kg; Dermal LD50 Rabbit: >1700 mg/kg

#### **Component Carcinogenicity**

#### Kaolin (1332-58-7)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

#### Silica, amorphous (7631-86-9)

IARC: Group 3 - Not Classifiable (IARC Monograph 68 [1997], Supplement 7 [1987])

#### **Aluminum oxide (1344-28-1)**

ACGIH: A4 - Not Classifiable as a Human Carcinogen

#### Carbon black (1333-86-4)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Group 2B - Possibly Carcinogenic to Humans (IARC Monograph 93 posted, Monograph 65

[1996])

## Crystalline silica (14808-60-7)

ACGIH: A2 - Suspected Human Carcinogen

NTP: Known Carcinogen (Select Carcinogen)

IARC: Group 1 - Known Human Carcinogen (IARC Monograph 68 [1997] (listed under Crystalline silica

inhaled in the form of quartz or cristobalite from occupational sources)

#### Xylenes (1330-20-7)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Group 3 - Not Classifiable (IARC Monograph 71 [1999], Monograph 47 [1989])

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#### **Chronic Toxicity**

Crystalline silica is considered a hazard by inhalation. The International Agency for Research on Cancer (IARC) has classified crystalline silica as a Group 1 substance, carcinogenic to humans. This classification is based on the findings of laboratory animal studies (inhalation and implantation) and epidemiology studies that were considered sufficient for carcinogenicity. Several studies have been conducted to determine the risk of cancer to workers exposed to dusts which contain crystalline silica. However, these studies did not consider other factors or elements that workers may be exposed to. Therefore, the causes of the excess deaths due to cancer could not be precisely determined. Further studies are being conducted to determine the risk of cancer when working with crystalline silica products. Excessive exposure to crystalline silica can cause silicosis, a non-cancerous lung disease.

Exposure to xylene can cause central nervous system, kidney, and liver damage. Repeated, prolonged skin contact will defat the skin, causing drying, cracking, and dermatitis.

# **Section 12 - Ecological Information**

## **Ecotoxicity**

#### A: General Product Information

No data available for this product.

## **B: Component Analysis - Ecotoxicity - Aquatic Toxicity**

Solvent naphtha (petroleum), light aliphatic (64742-89-8)

72 Hr EC50 Selenastrum capricornutum: 4700 mg/L

#### Silica, amorphous (7631-86-9)

96 Hr LC50 Brachydanio rerio: 5000 mg/L [static]

72 Hr EC50 Selenastrum capricornutum: 440 mg/L

48 Hr EC50 Ceriodaphnia dubia: 7600 mg/L

#### Carbon black (1333-86-4)

24 Hr EC50 Daphnia magna: >5600 mg/L

#### Xylenes (1330-20-7)

96 Hr LC50 Pimephales promelas: 13.4 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 8.05 mg/L [flow-through]; 96

Hr LC50 Lepomis macrochirus: 16.1 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 26.7 mg/L [static

3 Hr EC50 Chlorella vulgaris: 105.1 mg/L (related to p-Xylene)

24 hr EC50 Photobacterium phosphoreum: 0.0084 mg/L

48 Hr EC50 water flea: 3.82 mg/L; 48 Hr LC50 Gammarus lacustris: 0.6 mg/L

# **Section 13 - Disposal Considerations**

#### **US EPA Waste Number & Descriptions**

## **A: General Product Information**

This product is classified an ignitable hazardous waste by the Resource Conservation and Recovery Act (RCRA; 40 CFR 261: Waste # D001). Dispose of spilled material in accordance with federal, state, and local regulations in a hazardous waste facility. Empty containers must be handled with care due to product residue. Do not heat or cut empty containers with electric or gas torch. If you are unsure of the regulations, contact your local Public Health Department, or the local office of the Environmental Protection Agency (EPA).

#### **B: Component Waste Numbers**

Xylenes (1330-20-7)

RCRA: waste number U239 (Ignitable waste, Toxic waste)

#### **Disposal Instructions**

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

## **Section 14 - Transport Information**

## **International Transport Regulations**

DOT:

Cartridges: Consumer Commodity ORM-D ERG 171

5 gallon pails: UN1133, Adhesives, 3, PG II

Flammable Liquid Label Required

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IATA: UN1133, Adhesives, 3, PG II Flammable Liquid Label Required

IMDG: UN1133, Adhesives, 3, PG II Flammable Liquid Label Required

# 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. Fire hazard.

## **B: Component Analysis**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

#### **Aluminum oxide (1344-28-1)**

SARA 313: 1.0 % de minimis concentration (fibrous forms)

#### Xylenes (1330-20-7)

CERCLA: 100 lb final RQ; 45.4 kg final RQ

#### **State Regulations**

## A: General Product Information

Other state regulations may apply. Check individual state requirements.

#### **B: Component Analysis - State**

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS#	CA	FL	MA	MN	NJ	PA
Kaolin	1332-58-7	No	No	Yes	Yes	No	Yes
Stoddard solvent (mineral spirits)	8052-41-3	Yes	No	Yes	Yes	Yes	Yes
Silica, amorphous	7631-86-9	Yes	No	Yes	Yes	Yes	Yes
Aluminum oxide	1344-28-1	No	No	Yes	Yes	Yes	Yes
Carbon black	1333-86-4	Yes	No	Yes	Yes	Yes	Yes
Crystalline silica	14808-60-7	No	No	Yes	Yes	Yes	Yes
Xylenes	1330-20-7	Yes	No	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING! This product contains a chemical known to the state of California to cause cancer.

Carbon black

Crystalline silica

## Ethyl Benzene - not intentionally added

#### Benzene - not intentionally added

WARNING! This product contains the following substance(s) known to the state of California to cause reproductive harm.

#### Benzene - not intentionally added

#### A: TSCA Status

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

The following components listed in this product are listed on the TSCA Export Notification 12(b) list.

## **TSCA 12(b)**

Component	CAS	TSCA 12 (b)
Xylenes (related to p-Xylene)	1330-20-7	Yes

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#### **B: Component Analysis - Inventory**

Component	CAS#	TSCA	DSL	EINECS
Solvent naphtha (petroleum), light aliphatic	64742-89-8	Yes	Yes	Yes
Kaolin	1332-58-7	Yes	Yes	No
Stoddard solvent (mineral spirits)	8052-41-3	Yes	Yes	Yes
Silica, amorphous	7631-86-9	Yes	Yes	Yes
Aluminum oxide	1344-28-1	Yes	Yes	Yes
Polybutene homopolymer	9003-29-6	Yes	Yes	No
Carbon black	1333-86-4	Yes	Yes	Yes
Polyisobutylene	9003-27-4	Yes	Yes	No
Crystalline silica	14808-60-7	Yes	Yes	Yes
Xylenes	1330-20-7	Yes	Yes	Yes

#### **Component Analysis - WHMIS IDL**

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS#	Minimum Concentration
Stoddard solvent (mineral spirits)	8052-41-3	1 %
Silica, amorphous	7631-86-9	1 %
Aluminum oxide	1344-28-1	1 %
Carbon black	1333-86-4	1 %
Xylenes	1330-20-7	0.1 % (related to p-Xylene)

#### WHMIS Classification

Controlled Product Classification: B2, D2A, 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

Prepared for: Johns Manville Roofing Systems P. O. Box 5108 Denver, CO USA 80217-5108

Prepared by: Johns Manville Technical Center P.O. Box 625005 Littleton, CO USA 80162-5005

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
11/30/06	3105B-1.0000	New MSDS authoring system for new EPDM vendor.
09/17/09	3105B-1.0001	Updated SDS to GHS format. Updated transportation classification
		to include cartridges.

End of Sheet 3105B