

## Section 1 - Chemical Product and Company Identification

**Product Name** JM TPO Edge Sealant  
**CAS#** Mixture/None Assigned  
**Generic Name** Sealant (Rubber-Based)  
**Formula** Hydrocarbon Mixture  
**Chemical Name:** Organic Mixture  
**Hazard Label** RSD-038 or equivalent label  
**Manufacturer Information**

Johns Manville  
Roofing Systems Group  
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 TPO Edge Sealant

## Section 2 - Composition / Information on Ingredients

CAS #	Component	Percent
1330-20-7	Xylene	50-75
8052-41-3	Stoddard Solvent (Toluene)	5-20
13463-67-7	Titanium dioxide	1-5
68441-14-5	Synthetic rubber compound	<1

### Additional Component Information

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

## Section 3 - Hazards Identification

### Emergency Overview

APPEARANCE AND ODOR: White or Grey liquid.

Flammable chemical. Use water spray or fog to cool materials in or near fire. Fire is difficult to extinguish. Vapors may travel, and can be ignited by a remote source.

Inhalation of vapors may cause upper respiratory irritation or central nervous system depression - remove affected individuals to fresh air.

HMIS Rating = Health 2, Fire 3, Reactivity 0, Personal Protection: chemical goggles, impervious gloves

### Potential Health Effects

#### Summary

Irritating to the skin, eyes, and respiratory tract.

Vapors from this product may cause eye and upper respiratory irritation, dry throat and mouth, nausea, headache, dizziness, drowsiness, and coma in extreme cases. Prolonged exposures may lead to liver and kidney injury. This product is a pulmonary aspiration hazard.

#### Inhalation

Inhalation of vapors may cause irritation of the respiratory tract. Other symptoms include signs of CNS depression involving weakness, dizziness, giddiness, loss of coordination and judgment. Excessive inhalation of xylene may produce irreversible damage to the central nervous system. Severe overexposure may cause coma and death due to respiratory failure.

#### Skin

May cause irritation. Prolonged or repeated contact may cause redness, cracking, and may dry and/or defat the skin. Prolonged or repeated contact with product or contact with processing fumes or dusts may cause an allergic skin sensitization reaction.

**Ingestion**

This product may be harmful or fatal if swallowed. Ingestion can cause gastrointestinal irritation, nausea, vomiting, and diarrhea. Ingestion of large amounts may produce more serious toxicities. Aspiration of small amounts into the lung may produce severe lung damage, including chemical pneumonitis.

**Eyes**

May cause irritation. Symptoms include redness, swelling, tearing, and blurred vision. Overexposure to vapors, fumes, or particles from this material may cause eye damage, including vacuoles in the cornea and conjunctival irritation.

**Primary Routes of Entry (Exposure)**

Respiratory system, skin, and eye.

**Target Organs**

Upper respiratory passages, skin, and eyes.

**Medical Conditions Aggravated by Exposure**

As with any gas or vapor, pre-existing upper respiratory, lung diseases, CNS conditions, or skin diseases may be aggravated.

**Section 4 - First Aid Measures**

**First Aid: Inhalation**

Remove individual to fresh air and administer artificial respiration or oxygen as necessary. Seek medical attention.

**First Aid: Skin**

Wash exposed skin with soap and water. If irritation develops or persists, seek medical attention.

**First Aid: Ingestion**

Product is not intended to be ingested or eaten. If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting.

**First Aid: Eyes**

Flush eyes with large amounts of water for 5-20 minutes. Contact a medical professional.

**First Aid: Notes to Physician**

This material, if aspirated into the lungs, may cause chemical pneumonitis; treat the affected person appropriately.

**Section 5 - Fire Fighting Measures**

**Flash Point:** 27°C/81°F

**Upper Flammable Limit (UFL):** 7%

**Auto Ignition:** Not determined

**Rate of Burning:** Not determined

**General Fire Hazards**

Flammable liquid. Material is highly volatile and readily gives off vapors, which may travel along the ground or be moved by ventilation and be ignited by heat sources (such as pilot lights or other flames, sparks, heaters, smoking, electric motors, or static discharge) at locations distant from material handling point. Vapor may form flammable atmosphere in confined spaces or low areas. Pressure build-up may also occur in closed, heated containers. Water spray or fog should be used to keep containers cool.

**Hazardous Combustion Products**

Smoke, fumes, aldehydes, carbon monoxide, carbon dioxide, and other low molecular weight hydrocarbons.

**Extinguishing Media**

Foam, CO<sub>2</sub>, dry chemical, water spray or fog to cool materials in or near fire.

**Fire Fighting Equipment/Instructions**

Firefighters should wear full protective clothing including self contained breathing apparatus (SCBA).

**Section 6 - Accidental Release Measures**

**Containment Procedures**

Product is a flammable liquid. 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**

No additional information available.

**Evacuation Procedures**

Evacuate the area promptly. Keep upwind of the spilled material and isolate exposure.

**Special Procedures**

Avoid skin contact and inhalation of vapors during disposal of spills.

## Section 7 - Handling and Storage

### Handling Procedures

Use protective equipment as described in Section 8 of this material safety data sheet when handling uncontained material.

Product is a flammable liquid. No smoking. Keep away from ignition sources, such as heat, sparks, pilot lights, static electricity, and open flames. Materials should be kept in a cool, dry area. Containers exposed to elevated temperatures (such as heat or flames) may develop pressure build-up and rupture.

### Storage Procedures

Keep this material in a cool, well-ventilated place. Eliminate all sources of ignition.

## Section 8 - Exposure Controls / Personal Protection

### A: Component Exposure Limits

#### Xylene (1330-20-7)

ACGIH: 100 ppm TWA  
150 ppm STEL  
OSHA: 100 ppm TWA; 435 mg/m<sup>3</sup> TWA  
150 ppm STEL; 655 mg/m<sup>3</sup> STEL

#### Stoddard Solvent (Toluene) (8052-41-3)

ACGIH: 100 ppm TWA  
OSHA: 100 ppm TWA; 525 mg/m<sup>3</sup> TWA

#### Titanium dioxide (13463-67-7)

ACGIH: 10 mg/m<sup>3</sup> TWA  
OSHA: 10 mg/m<sup>3</sup> TWA (total dust)

### PERSONAL PROTECTIVE EQUIPMENT

#### Personal Protective Equipment: Eyes/Face

Safety glasses with sideshields, chemical goggles, or a face shield is recommended.

#### Personal Protective Equipment: Skin

Solvent resistant gloves, protective coveralls, and long sleeves are recommended.

#### Personal Protective Equipment: Respiratory

If vapor levels are above the applicable exposure limits, a NIOSH-approved organic vapor respirator must be provided and worn.

#### Ventilation

Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces. Ventilation should effectively remove and prevent buildup of any vapor/mist/fume/dust generated from the handling of this product. Special care must be taken to avoid inhalation exposure when using this product at high temperatures.

#### Personal Protective Equipment: General

Use good industrial hygiene practices when handling this material.

## Section 9 - Physical & Chemical Properties

<p><b>Appearance:</b> White or light grey liquid</p> <p><b>Physical State:</b> liquid</p> <p><b>Vapor Pressure:</b> Not determined</p> <p><b>Boiling Point:</b> 281-398°F @ 760 mm Hg</p> <p><b>Solubility (H<sub>2</sub>O):</b> Insoluble</p> <p><b>Freezing Point:</b> Not determined</p> <p><b>Viscosity:</b> Not determined</p> <p><b>VOC:</b> Approximately 970 g/liter</p>	<p><b>Odor:</b> No odor</p> <p><b>pH:</b> Not determined</p> <p><b>Vapor Density:</b> &gt;1</p> <p><b>Melting Point:</b> Not applicable</p> <p><b>Specific Gravity:</b> 0.93517</p> <p><b>Evaporation Rate:</b> &lt;1</p> <p><b>Percent Volatile:</b> White = 82.6% Grey = 81.59%</p>
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## Section 10 - Chemical Stability & Reactivity Information

### Chemical Stability

This is a stable material. This product is not reactive.

### Chemical Stability: Conditions to Avoid

Avoid open flame and excessive temperatures. Keep away from ignition sources and incompatible materials.

**Incompatibility**

Strong oxidizing agents, reducing agents, strong acids and alkalis. Avoid extreme heat which can result in thermal decomposition releasing toxic gases.

**Hazardous Decomposition**

Carbon monoxide, carbon dioxide, hydrogen chloride and other various hydrocarbons.

**Hazardous Polymerization**

Will not occur.

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

Excessive exposure to the vapors from this product is irritating to the eyes, skin, and respiratory tract. It may cause vomiting, headache, dizziness, gastric discomfort, dry throat, watery eyes, light-headedness. Very high concentrations may have other central nervous system effects, including death.

**B: Component Analysis - LD50/LC50****Xylene (1330-20-7)**

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

**Carcinogenicity****A: General Product Information**

No information available for the product.

**B: Component Carcinogenicity****Xylene (1330-20-7)**

ACGIH: A4 - Not Classifiable as a Human Carcinogen

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

**Titanium dioxide (13463-67-7)**

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Group 3 - Not Classifiable (IARC Monograph 47, 1989)

**Chronic Toxicity**

Repeated, prolonged skin contact will defat the skin, causing drying, cracking, and dermatitis. Exposure to vapors, or prolonged skin contact may result in sensitization to isocyanate products due to the presence of isocyanates. Exposure to vapors can cause skin, central nervous system (CNS), liver, and kidney damage. Prolonged intentional toluene abuse may lead to hearing loss progressing to deafness. It has been suggested that workers exposed to organic solvents, including toluene, along with noise may suffer greater hearing loss than would be expected from exposure to noise alone. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver and kidney effects, cardiac sensitization, damage to the central nervous system, respiratory tract, eye and kidney, and effects on hearing. Overexposure to this material or its components has been suggested as a cause of the following effects in humans: cardiac sensitization, kidney damage.

**Neurotoxicity**

No data available for this product. Chronic xylene exposure has produced irreversible damage to the central nervous system including hearing damage.

**Mutagenicity**

No information for the product. Occupational exposure to xylene has been reported to elevate sister chromatid exchanges and chromosome aberrations in exposed laboratory workers and their children.

**Teratogenicity**

No information available for this product. Xylene crosses the placenta and has elevated the risk of spontaneous abortion in women exposed during their first trimester. Although xylene is not considered teratogenic, it is embryotoxic and fetotoxic, particularly at doses which cause maternal toxicity.

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

No data available for this product. Organic solvents may produce significant toxicity to aquatic organisms and ecosystems.

**B: Component Analysis - Ecotoxicity - Aquatic Toxicity****Xylene (1330-20-7)**

Material Name: JM TPO Edge Sealant

Material Safety Data  
Sheet ID: 3213

96 Hr LC50 fathead minnow: 13.4 mg/L (flow-through); 96 Hr LC50 rainbow trout: 8.05 mg/L (flow-through); 96 Hr LC50 bluegill: 16.1 mg/L (flow-through)  
24 hr EC50 Photobacterium phosphoreum: 0.0084 mg/L  
48 Hr EC50 water flea: 3.82 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. Decontaminate empty containers prior to disposal. 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

##### Xylene (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 - Transportation Information

Shipping Name: Adhesive (Xylene)

UN/NA #: UN1133 Hazard Class: 3 Packing Group: III

Required Label(s): FLAMMABLE LIQUID

Additional Info.: None

## 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).

##### Xylene (1330-20-7)

SARA 313: 1.0 % de minimis concentration

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. This product may contain trace levels of silica, crystalline quartz, and carbon black.

#### 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
Xylene	1330-20-7	Yes	No	Yes	Yes	Yes	Yes
Stoddard Solvent (Toluene)	8052-41-3	Yes	No	Yes	Yes	Yes	Yes
Titanium dioxide	13463-67-7	No	No	Yes	Yes	Yes	Yes

#### 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
Xylene	1330-20-7	Yes	Yes	Yes
Stoddard Solvent (Toluene)	8052-41-3	Yes	Yes	Yes
Titanium dioxide	13463-67-7	Yes	Yes	Yes
Synthetic rubber compound	68441-14-5	Yes	Yes	No

**Component Analysis - WHMIS IDL**

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

Component	CAS #	Minimum Concentration
Stoddard Solvent (Toluene)	8052-41-3	1 % (English Item 1468, French Item 1498)

<b>Section 16 - Other Information</b>
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**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
08/01/00	3213-1.0000	New MSDS authoring system.
01/12/01	3213-1.0100	Sect. 2: added quartz, possible trace contaminant. Other minor editing.
02/08/01	3213-1.0102	Sect. 14: updated DOT information.
08/13/01	3213-1.0103	Sect: 1: Trade names, added UltraGard TPO Seam Sealant; Sect. 5: updated; Sect. 9: updated.
03/05/03	3213-1.0104	Sect. 1, deleted seam sealant, renamed <b>cut</b> edge sealant. Other minor edits.
03/25/05	3213-1.0105	Sect 1 updated label ID. Titanium Dioxide added to composition. MSDS edited for new TPO sealants in grey and white & regulatory update.
02/23/07	3213-1.0106	Changed UltraGard to JM in trade names.

This is the end of MSDS # 3213