

Section 1 - Product and Company Identification

Hazard Label No label required

Company InformationJohns Manville
Roofing Systems Group
P.O. Box 5108
Denver, CO 80127 USATelephone: 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 Walkway Pad; JM TPO-1 Walkway Pad

Section 2 - Composition / Information on Ingredients

CAS #	Component	Percent
1317-65-3	Calcium carbonate	25-55
Not Available	Polyolefinic polymers	35-40
13463-67-7	Titanium dioxide	<10
Not Available	Phthalate/terephthalate plasticizers	7-10
1309-42-8	Magnesium hydroxide	<5
1333-86-4	Carbon black (encapsulated) (grey colored products only)	<3
Not Available	Color Concentrate (encapsulated)	1-3
Not Available	Lead Compounds	<0.01
Not Available	Chromium Compounds	<0.01
7440-66-6	Zinc	<0.01
14808-60-7	Crystalline silica (encapsulated)	TRACE

Pigments and additives are fully encapsulated and are not expected to cause any hazardous conditions when processed in accordance with normal roofing practices.

Section 3 - Hazards Identification**Emergency Overview**

APPEARANCE AND ODOR: Solid, white, grey, or tan composite plastic structure. No odor.

Under normal conditions of use and handling, this product is not expected to create any health or safety hazards. If the product is burned due to exposure to fire, use normal fire fighting procedures to prevent inhalation of smoke and gases.

HMIS Rating: Health = 1, Fire = 0, Reactivity = 0

Potential Health Effects**Summary**

Due to product form, exposures to dusts and fumes are not expected to occur. If this product is cut or heated, dust and/or fumes generated may cause respiratory irritation and congestion in extreme cases. Prolonged and excessive skin contact may result in irritation.

Inhalation

During normal use of this product there is not expected to be an inhalation hazard.

Heating this product may release harmful vapors. Excessive inhalation of processing vapors from this product may be harmful to the respiratory tract.

Skin

Under normal conditions of use, this product is not expected to be a skin irritant.

Processing or heating of this product may produce dusts, particulates, vapors, and fumes that may cause irritation to the skin. Prolonged or repeated contact may cause redness and/or cracking.

Absorption

Not applicable.

Ingestion

May cause nausea, vomiting, and diarrhea.

Eyes

Under normal conditions of use, this product is not expected to be an eye irritant. Processing or heating of this product may cause dusts, particulates, vapors, and fumes which may cause irritation to the eyes. Symptoms include redness, swelling, tearing, and blurred vision.

Primary Routes of Entry (Exposure)

Inhalation (breathing) and eyes when heating this material.

Target Organs

None identified.

Section 4 - First Aid Measures

First Aid: Inhalation

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

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 until irritation subsides. If irritation persists, seek medical attention.

First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically.

Section 5 - Fire Fighting Measures

Flash Point: Not determined

Upper Flammable Limit (UFL): Not applicable

Auto Ignition: Not determined

Rate of Burning: Not determined

General Fire Hazards

There is no potential for spontaneous fire or explosion.

Hazardous Combustion Products

Irritating and toxic gases or fumes may be released during a fire.

Extinguishing Media

Dry chemical, foam, carbon dioxide.

Fire Fighting Equipment/Instructions

No special procedures are expected to be necessary for this product. Normal fire fighting procedures should be followed to avoid inhalation of smoke and gases.

NFPA Ratings: Health = 1, Fire = 1, Reactivity = 0

Method Used: Not applicable

Lower Flammable Limit (LFL): Not applicable

Flammability Classification: Not determined

Section 6 - Accidental Release Measures

Clean-Up Procedures

Pick up large pieces. Vacuum dusts. If sweeping is necessary, use a dust suppressant such as water. Do not dry sweep dust accumulation. These procedures will help to minimize potential exposures.

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. Material should be kept clean, dry, and in original packaging.

Section 8 - Exposure Controls / Personal Protection

A: Component Exposure Limits

Calcium carbonate (1317-65-3)

OSHA: 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)

Titanium dioxide (13463-67-7)

ACGIH: 10 mg/m3 TWA
OSHA: 10 mg/m3 TWA (total dust)

Carbon black (encapsulated) (grey colored products only) (1333-86-4)

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

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

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

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear safety glasses with side shields. Wear chemical goggles for fumes which may arise from thermal processing.

Personal Protective Equipment: Skin

Wear impervious gloves for prolonged contact. The use of protective coveralls and long sleeved clothing is recommended for prolonged or repeated contact. Wash thoroughly after use.

Personal Protective Equipment: Respiratory

If ventilation is not sufficient to effectively remove and prevent buildup of dusts or processing fumes, appropriate NIOSH approved respirator must be provided.

Ventilation

Ventilation is not necessary unless products are heated. If products are heated, use general ventilation and local exhaust, where possible, and in confined or enclosed spaces.

Personal Protective Equipment: General

Use good industrial hygiene practices when handling this material.

Section 9 - Physical & Chemical Properties

<p>Appearance: Solid, white, grey or tan composite plastic structure</p> <p>Physical State: Solid</p> <p>Vapor Pressure: Not applicable</p> <p>Boiling Point: Not determined</p> <p>Solubility (H₂O): Not determined</p> <p>Freezing Point: Not applicable</p> <p>Percent Volatile: 0</p>	<p>Odor: No odor</p> <p>pH: Not applicable</p> <p>Vapor Density: Not applicable</p> <p>Melting Point: Not determined</p> <p>Specific Gravity: Not determined</p> <p>Evaporation Rate: Not applicable</p> <p>VOC: Not applicable</p>
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Section 10 - Stability & Reactivity Information

Stability

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

Stability: Conditions to Avoid

Avoid open flame and excessive temperatures.

Incompatibility

Strong acids, strong bases, extreme heat, and oxidizing agents.

Hazardous Decomposition

Irritating and/or toxic fumes and gases may be released during a fire. Upon decomposition, this product emits carbon monoxide, carbon dioxide, and/or low molecular weight hydrocarbons.

Hazardous Polymerization

Will not occur.

Section 11 - Toxicological Information

Acute Toxicity

A: General Product Information

No additional information available. Processing of this product can include formation of dusts, particulates, or fumes which may be irritating to eyes, skin, and respiratory system.

B: Component Analysis - LD50/LC50

Titanium dioxide (13463-67-7)

Oral LD50 Rat: >10000 mg/kg

Magnesium hydroxide (1309-42-8)

Oral LD50 Rat: 8500 mg/kg

Carbon black (encapsulated) (grey colored products only) (1333-86-4)

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

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

Oral LD50 Rat: 500 mg/kg

Carcinogenicity

A: General Product Information

No data for this product as a whole.

B: Component Carcinogenicity

Titanium dioxide (13463-67-7)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Group 2B – Possibly Carcinogenic to Humans (IARC Monograph 93 posted, Monograph 47 [1989])

Carbon black (encapsulated) (grey colored products only) (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 (encapsulated) (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))

Chronic Toxicity

None identified.

Section 12 - Ecological Information

Ecotoxicity

A: General Product Information

No data available for this product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Carbon black (encapsulated) (grey colored products only) (1333-86-4)

24 Hr EC50 Daphnia magna: >5600 mg/L

Zinc (7440-66-6)

96 Hr LC50 Pimephales promelas: 6.4 mg/L

96 Hr EC50 Selenastrum capricornutum: 30 µg/L

72 Hr EC50 water flea: 5 µg/L

Section 13 - Disposal Considerations

US EPA Waste Number & Descriptions

A: General Product Information

Waste should be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

B: Component Waste Numbers

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

Disposal Instructions

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

Section 14 - Transportation Information**International Transportation 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 311/312: This product is not classified as hazardous under SARA 311/312.

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).

Zinc (7440-66-6)

CERCLA: 1000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is larger than 100 micrometers); 454 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the solid metal released is larger than 100 micrometers)

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
Calcium carbonate	1317-65-3	No	No	Yes	Yes	No	Yes
Titanium dioxide	13463-67-7	No	No	Yes	Yes	Yes	Yes
Carbon black (encapsulated) (grey colored products only)	1333-86-4	Yes	No	Yes	Yes	Yes	Yes
Zinc	7440-66-6	Yes	No	Yes	No	Yes	Yes
Crystalline silica (encapsulated)	14808-60-7	No	No	Yes	Yes	Yes	Yes

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.

International Regulations**A: General Product Information**

These products are considered articles under both U.S. and international product regulations and as such, these products do not require registration or notification on the various country-specific inventories.

B: Component Analysis - WHMIS IDL

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

Component	CAS #	Minimum Concentration
Carbon black (encapsulated) (grey colored products only)	1333-86-4	1 %

WHMIS Classification

This is not a WHMIS controlled product. 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 Group
P. O. Box 5108
Denver, CO USA 80217-5108

Material Name: JM TPO Walkway Pads

**Safety Data Sheet
ID: 3305**

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
07/26/07	3305-1.0000	New MSDS. Added TPO Walkway Pad from MSDS 3216. Added TPO-1 Walkway Pad.

This is the end of MSDS # 3305