Section 1 - Product and Company Identification

Hazard Label WARNING

Company Information

Johns Manville
Insulation 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: Garage Door Insulation Kit

Section 2 - Hazards Identification

Emergency Overview

Product dust may cause mechanical irritation of skin and mucous membranes.

Inhalation

Temporary mechanical irritation may occur upon exposure to dust or fibers released from cutting this product.

Skin

Temporary irritation (itching) or redness may occur.

Ingestion

This product is not intended to be ingested (eaten). If ingested, it may cause temporary irritation to the gastrointestinal (digestive) tract.

Eyes

Temporary irritation (itching) or redness may occur.

Primary Routes of Entry (Exposure)

Eyes, skin, inhalation (breathing dust and fibers) and ingestion.

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
Not Available	Fiber Glass Wool (generic CAS for glass is 65997-17-3)	25-49
9002-86-2	PVC (Chloroethylene, polymer)	18-24
117-81-7	Di(2-ethylhexyl)phthalate (present in vinyl)	5-15
141-78-6	Ethylacetate (present in velcro)	8-11
1309-64-4	Antimony trioxide (present in vinyl)	
100-42-5	Styrene	
107-13-1	Acrylonitrile	

Section 4 - First Aid Measures

First Aid: Inhalation

If dust is inhaled in excess of exposure limits referenced in section 8 of this safety data sheet, remove individual to fresh air. Drink water to clear throat, and blow nose to remove dust. A saline spray in the nose may help clear any fibers.

First Aid: Skin

Wash gently with soap and water to remove dust and fibers. Alternatively, fibers can be removed from the skin by use of ordinary masking or wrapping tape. Should irritation persist, seek medical attention.

First Aid: Eyes

Do not rub or scratch eyes. Dust particles may cause the eye to be scratched. Flush eyes with large amounts of water until irritation subsides. If irritation persists, seek medical attention.

First Aid: Notes to Physician

Dust from the product may cause mechanical irritation of the eyes, skin, and upper respiratory tract. Treat symptomatically.

Section 5 - Fire Fighting Measures

Flash Point: Not applicable
Auto Ignition: Not applicable
Rate of Burning: Not determined

General Fire Hazards

There is no potential for spontaneous fire or explosion. Inorganic glass fibers are naturally non-combustible and non-flammable. Organic binder can thermally decompose with elevated temperatures.

Extinguishing Media

Carbon dioxide (CO_2), water, water fog, dry chemical.

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.

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

Exposure Guidelines

A: General Product Information

The Occupational Safety and Health Administration (OSHA) has not adopted specific occupational exposure standards for fiber glass. Fiber glass is treated as a nuisance dust and is regulated by OSHA as a particulate not otherwise regulated (total dust) shown in CFR 1910.1000 Table Z-3.
Respirable fraction 5 mg/m3
Total dust 15 mg/m3

JM has adopted the fiber glass industry voluntary Product Stewardship Program (PSP), formerly the NAIMA-OSHA Health and Safety Partnership Program (HSPP). Under the PSP, JM recommends that exposures be limited to the voluntary concentration of 1 f/cc TWA for fibers longer than 5 microns with a diameter less than 3 microns. This will help minimize potential irritation effects. The PSP also includes the PPE recommendations described below.

B: Component Exposure Limits

PVC (Chloroethylene, polymer) (9002-86-2)

ACGIH: 1 mg/m3 TWA (respirable fraction)

Di(2-ethylhexyl)phthalate (present in vinyl) (117-81-7)

OSHA: 5 mg/m3 TWA
ACGIH: 5 mg/m3 TWA

Acrylonitrile (107-13-1)

OSHA: 2 ppm TWA
1 ppm Action Level; 2 ppm TWA; 10 ppm Excursion Limit (15 min, Skin and eye exposure prohibited. Cancer hazard - see 29 CFR 1910.1045)
ACGIH: 2 ppm TWA
Skin - potential significant contribution to overall exposure by the cutaneous route

Styrene (100-42-5)
OSHA: 100 ppm TWA
50 ppm TWA; 215 mg/m3 TWA
ACGIH: 20 ppm TWA
40 ppm STEL

C: Exposure Limits for Chemicals which may be generated during processing

Acrolein (generated from fiber glass wool only at elevated temperatures) (107-02-8)
ACGIH: 0.1 ppm Ceiling
Skin - potential significant contribution to overall exposure by the cutaneous route
OSHA: 0.1 ppm TWA; 0.25 mg/m3 TWA
0.3 ppm STEL; 0.8 mg/m3 STEL
NIOSH: 0.1 ppm TWA; 0.25 mg/m3 TWA
0.3 ppm STEL; 0.8 mg/m3 STEL

Acrylonitrile (generated from fiber glass wool only at elevated temperatures) (107-13-1)
ACGIH: 2 ppm TWA
Skin - potential significant contribution to overall exposure by the cutaneous route
OSHA: 1 ppm Action Level; 2 ppm TWA; 10 ppm Excursion Limit (15 min, Skin and eye exposure prohibited. Cancer hazard - see 29 CFR 1910.1045)
NIOSH: 1 ppm TWA
10 ppm Ceiling (15 min)
Potential for dermal absorption

Hydrogen cyanide (generated from fiber glass wool only at elevated temperatures) (74-90-8)
ACGIH: 4.7 ppm Ceiling (as CN)
Skin - potential significant contribution to overall exposure by the cutaneous route
OSHA: 4.7 ppm STEL; 5 mg/m3 STEL
Prevent or reduce skin absorption
NIOSH: 4.7 ppm STEL; 5 mg/m3 STEL
Potential for dermal absorption

Sulfur dioxide (generated from fiber glass wool only at elevated temperatures) (7446-09-5)
ACGIH: 2 ppm TWA
5 ppm STEL
OSHA: 2 ppm TWA; 5 mg/m3 TWA
5 ppm STEL; 15 mg/m3 STEL
NIOSH: 2 ppm TWA; 5 mg/m3 TWA
5 ppm STEL; 13 mg/m3 STEL

Formaldehyde (generated from fiber glass wool only at elevated temperatures) (50-00-0)
ACGIH: 0.3 ppm Ceiling
OSHA: 0.5 ppm Action Level; 0.75 ppm TWA; 2 ppm STEL (Irritant and potential cancer hazard - see 29 CFR 1910.1048)
NIOSH: 0.016 ppm TWA
0.1 ppm Ceiling (15 min)

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Safety glasses with side shields are recommended to keep dust out of the eyes.

Personal Protective Equipment: Skin

Leather or cotton gloves should be worn to protect against mechanical abrasion. See also Personal Protective Equipment: General, below.

Personal Protective Equipment: Respiratory

A respirator should be used if ventilation is unavailable, or is inadequate for keeping dust and fiber levels below the applicable exposure limits referenced in Section 8 of this SDS. Wear a NIOSH-certified disposable or reusable particulate respirator with an efficiency rating of N95 or higher (per 42 CFR 84) when dust or fiber concentrations exceed the applicable exposure limits. Operations such as sawing, blowing, tear out, and spraying may generate airborne fiber concentrations requiring a higher level of respiratory protection. For exposures up to 50 times the established exposure limits use a full-face respirator, rated N99 or higher.

Ventilation

In fixed manufacturing settings, local exhaust ventilation should be provided at areas of cutting, milling or other processing to remove airborne dust and fibers.

Personal Protective Equipment: General

Wear a cap, a loose-fitting, long-sleeved shirt and long pants to protect skin from irritation. Exposed skin areas should be washed with soap and water after handling or working with fiber glass. Clothing should be washed separately from other clothes, and the washer should be rinsed thoroughly (run empty for a complete wash cycle). This will reduce the chances of fiber glass being transferred to other clothing.

Section 9 - Physical & Chemical Properties

Physical State:	solid	**Odor:**	No significant odor
Vapor Pressure:	Not applicable	**pH:**	Not applicable
Solubility (H_2O):	Insoluble	**Vapor Density:**	Not applicable
Freezing Point:	Not applicable	**Melting Point:**	>704ºC/1300ºF (fiber glass wool)
VOC:	Not Determined	**Specific Gravity:**	Variable
		Evaporation Rate:	Not applicable

Section 10 - Stability & Reactivity Information

Stability

These products are not reactive.

Hazardous Polymerization

Will not occur.

Section 11 - Toxicological Information

Acute Toxicity

A: General Product Information

Dust from this product is a mechanical irritant, which means that it may cause temporary irritation or scratchiness of the throat, and/or itching of the eyes and skin.

B: Component Analysis - LD50/LC50

Di(2-ethylhexyl)phthalate (present in vinyl) (117-81-7)
Inhalation LC50 Rat: >10.62 mg/L/4H; Inhalation LC50 Rat:>23.67 mg/L/1H; Oral LD50 Rat:6860 mg/kg; Dermal LD50 Rabbit:24500 mg/kg

Antimony trioxide (present in vinyl) (1309-64-4)
Oral LD50 Rat: >34600 mg/kg

Acrylonitrile (107-13-1)
Inhalation LC50 Rat: 333 ppm/4H; Oral LD50 Rat:78 mg/kg; Dermal LD50 Rat:148 mg/kg; Dermal LD50 Rabbit:250 mg/kg

Styrene (100-42-5)
Inhalation LC50 Rat: 11.8 mg/L/4H; Oral LD50 Rat:1000 mg/kg

Component Carcinogenicity

Fiber Glass Wool (generic CAS for glass is 65997-17-3)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans (listed under Synthetic Vitreous Fibers)
NTP: Reasonably Anticipated To Be A Human Carcinogen (respirable size)
IARC: Group 3 – Not Classifiable (IARC Monograph 81 [2002] (listed under Man-made mineral fibres), Monograph 43 [1988])

PVC (Chloroethylene, polymer) (9002-86-2)

ACGIH: A4 - Not Classifiable as a Human Carcinogen
IARC: Group 3 – Not Classifiable (IARC Supplement 7 [1987], Monograph 19 [1979])

Di(2-ethylhexyl)phthalate (present in vinyl) (117-81-7)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
NTP: Reasonably Anticipated To Be A Human Carcinogen (Possible Select Carcinogen)
IARC: Group 3 – Not Classifiable (IARC Monograph 77 [2000] (overall evaluation downgraded from 2B to 3 with supporting evidence from other relevant data), Supplement 7 [1987])

Antimony trioxide (present in vinyl) (1309-64-4)

ACGIH: A2 - Suspected Human Carcinogen (production)
IARC: Group 2B – Possibly Carcinogenic to Humans (IARC Monograph 47 [1989])

Acrylonitrile (107-13-1)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
OSHA: 1 ppm Action Level; 2 ppm TWA; 10 ppm Excursion Limit (15 min, Skin and eye exposure prohibited. Cancer hazard - see 29 CFR 1910.1045)
NTP: Reasonably Anticipated To Be A Human Carcinogen
IARC: Group 2B – Possibly Carcinogenic to Humans (IARC Monograph 71 [1999], Supplement 7 [1987])

Styrene (100-42-5)

ACGIH: A4 - Not Classifiable as a Human Carcinogen
IARC: Group 2B – Possibly Carcinogenic to Humans (IARC Monograph 82 [2002], Monograph 60 [1994])

Chronic Toxicity

The U.S. Department of Health and Human Services, National Toxicology Program (NTP 1998, 2000, 2002) classified glass wool (respirable size) as reasonably anticipated to be a human carcinogen, based on sufficient evidence of carcinogenicity in animals. This assessment was originally prepared in 1993-1994 for the 7th Report on Carcinogens (NTP 1994), but has not been updated since then in the 8th, 9th, or 10th Reports on Carcinogens (NTP 1998, 2000, 2002).

Section 12 - Ecological Information

Ecotoxicity

A: General Product Information

No data available for this product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Di(2-ethylhexyl)phthalate (present in vinyl) (117-81-7)

96 Hr LC50 Pimephales promelas: >0.27-0.67 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas:>0.16 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss:>100 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss:>0.32 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus:>0.200 mg/L [static]; 96 Hr LC50 Lepomis macrochirus:>0.200 mg/L [flow-through]; 96 Hr LC50 Oryzias latipes:>0.32 mg/L [semi-static]; 96 Hr LC50 Oryzias latipes:>0.67 mg/L [flow-through]; 96 Hr LC50 Brachydanio rerio:>0.32 mg/L [semi-static]; 96 Hr LC50 Poecilia reticulata:>0.32 mg/L [semi-static]
72 Hr EC50 Scenedesmus subspicatus: >130 mg/L; 496 Hr EC50 Selenastrum capricornutum: >0.1 mg/L
48 Hr EC50 water flea: 11.0 mg/L (24 hours old); 48 Hr EC50 Daphnia magna: 9.4 mg/L

Antimony trioxide (present in vinyl) (1309-64-4)
96 Hr LC50 Pimephales promelas: >80 mg/L [static]; 96 Hr LC50 Brachydanio rerio:>1000 mg/L [static]
72 Hr EC50 Selenastrum capricornutum: 67 mg/L
48 Hr EC50 Daphnia magna: >1000 mg/L

Acrylonitrile (107-13-1)
96 Hr LC50 Pimephales promelas: 6.7-15 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus:8.0-12.0 mg/L [static]; 96 Hr LC50 Poecilia reticulata:33.5 mg/L [static]; 96 Hr LC50 Brachydanio rerio:25 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss:24 mg/L; 96 Hr LC50 Cyprinus carpio:18.07 mg/L [semi-static]; 96 Hr LC50 Lepomis macrochirus:8.7-10 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas:28-39 mg/L [static]
48 Hr EC50 water flea: 7.60 mg/L

Styrene (100-42-5)
96 Hr LC50 Pimephales promelas: 3.24-4.99 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus:19.03-33.53 mg/L [static]; 96 Hr LC50 Pimephales promelas:6.75-14.5 mg/L [static]; 96 Hr LC50 Poecilia reticulata:58.75-95.32 mg/L [static]
72 Hr EC50 Selenastrum capricornutum: 1.4 mg/L; 96 Hr EC50 Selenastrum capricornutum: 0.72 mg/L
48 Hr EC50 Daphnia magna: 4.7 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

Di(2-ethylhexyl)phthalate (present in vinyl) (117-81-7)
RCRA: waste number U028

Acrylonitrile (107-13-1)
RCRA: waste number U009

Disposal Instructions

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

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

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).

Di(2-ethylhexyl)phthalate (present in vinyl) (117-81-7)
SARA 313: 0.1 % de minimis concentration
CERCLA: 100 lb final RQ; 45.4 kg final RQ

Antimony trioxide (present in vinyl) (1309-64-4)
CERCLA: 1000 lb final RQ; 454 kg final RQ

Acrylonitrile (107-13-1)
SARA 302: 10000 lb TPQ
CERCLA: 100 lb final RQ; 45.4 kg final RQ

Styrene (100-42-5)
CERCLA: 1000 lb final RQ; 454 kg final RQ

State Regulations

A: General Product Information

Other state regulations may apply. Check individual state requirements.

The glass fibers in this product are not known to be regulated.

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
PVC (Chloroethylene, polymer)	9002-86-2	No	No	No	No	Yes	No
Di(2-ethylhexyl)phthalate (present in vinyl)	117-81-7	Yes	No	Yes	Yes	Yes	Yes
Antimony trioxide (present in vinyl)	1309-64-4	Yes	No	Yes	Yes	Yes	Yes
Acrylonitrile	107-13-1	Yes	No	Yes	Yes	Yes	Yes
Styrene	100-42-5	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.
Di(2-ethylhexyl)phthalate (present in vinyl) 117-81-7
Acrylonitrile 107-13-1
Antimony trioxide (present in vinyl) 1306-64-4
Acetaldehyde (potential trace decomposition) 75-07-0
Benzene (potential trace decomposition) 71-43-2
Ethylbenzene (potential trace decomposition) 100-41-4
Formaldehyde (potential trace decomposition) 50-00-0
Pyridine (potential trace decomposition) 110-86-1

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects.
Di(2-ethylhexyl)phthalate (present in vinyl) 117-81-7
Toluene (potential trace decomposition) 108-88-3
Benzene (potential trace decomposition) 71-43-2

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
Fiber Glass Wool (generic CAS for glass is 65997-17-3)	Not Available	1 % (related to Fibrous glass)
Di(2-ethylhexyl)phthalate (present in vinyl)	117-81-7	0.1 %

WHMIS Classification

Controlled Product Classification: 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:
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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
07/19/10	1206-1.0000	SDS for new product.

End of Sheet 1206