

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:

Basement Wall Insulation, Faced
Condensation Blanket, Faced
FSK-25 Faced Batts
ITP Concrete Wall Insulation®

Laminated Metal Building Insulation
Panel-Deck FSK-25
Panel-Deck PSK
PSK-Faced Roll

Use: For use in commercial, residential, manufactured housing, and metal buildings.

Section 2 - Hazards Identification

Emergency Overview

Inhalation of excessive amounts of dust from the product may cause temporary upper respiratory irritation and/or congestion--remove individual to fresh air.

Inhalation

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

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.

Ears

Temporary irritation (itching) or redness 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 |
|---------------|--|---------|
| Not Available | Fiber glass wool | 80-98 |
| Not Available | Thermoset resin | 2-15 |
| Not Available | Foil/kraft, FSK, polyethylene, PSK, and various metal building facings | 0-15 |
| 1309-64-4 | Antimony trioxide (may be in facing or adhesive) | >0.1 |

Component Information

Antimony trioxide (fire retardant) may be present in the facings and/or adhesives. Occupational exposure to airborne antimony trioxide is not expected to occur due to product form(s) and intended use(s). Exposure limit is given for reference only.

General Product Description

Fibrous glass board, batt, blanket, with various facings. No significant odor.

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: Ingestion

Rinse mouth with water to remove dust and fibers and drink plenty of water to help reduce irritation. If irritation persists, 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: Ears

Wash exposed skin with soap and water. If irritation develops in the inner ear, 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

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. Inorganic glass fibers are naturally non-combustible and non-flammable.

Extinguishing Media

Carbon dioxide (CO₂), 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.

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

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**Antimony trioxide (may be in facing or adhesive) (1309-64-4)**

ACGIH: 0.5 mg/m3 TWA (related to Antimony)

OSHA: 0.5 mg/m3 TWA (related to Antimony)

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: Ears

Use ear protection (earplugs, hood, or earmuffs) to prevent airborne dust or fibers from entering the ear, if necessary.

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 NIOSH-certified 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.

Ventilation

In fixed manufacturing settings, local exhaust ventilation should be provided at areas of cutting to remove airborne dust and fibers. General dilution ventilation should be provided as necessary to keep airborne dust and fibers below the applicable exposure limits and guidelines. The need for ventilation systems should be evaluated by a professional industrial hygienist.

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

| | | | |
|-------------------------------------|---|--------------------------|---------------------|
| Appearance: | Fibrous glass board, batt, blanket, or with various facings | Odor: | No significant odor |
| Physical State: | Solid | pH: | Not applicable |
| Vapor Pressure: | Not applicable | Vapor Density: | Not applicable |
| Boiling Point: | Not applicable | Melting Point: | >704°C/1300°F |
| Solubility (H₂O): | Nil | Specific Gravity: | Variable |
| Freezing Point: | Not applicable | Evaporation Rate: | Not applicable |
| Percent Volatile: | 0 | VOC: | Not determined |

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

These products are not reactive.

Hazardous Decomposition

May form carbon dioxide and carbon monoxide.

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**Antimony trioxide (may be in facing or adhesive) (1309-64-4)**

Oral LD50 Rat: >34600 mg/kg

Component Carcinogenicity

Fiber glass wool

NTP: Not listed.
IARC: Group 3 - Not Classifiable (IARC Monograph 81 [2002] (listed under Man-made mineral fibres), Monograph 43 [1988])

Antimony trioxide (may be in facing or adhesive) (1309-64-4)

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

Chronic Toxicity

Fiber Glass Wool (non-durable glass fibers):

In October 2001, IARC classified fiber glass wool as Group 3, "not classifiable as to its carcinogenicity to humans." The 2001 decision was based on current human and animal research that shows no association between inhalation exposure to dust from fiber glass wool and the development of respiratory disease

In 2011, the National Toxicology Program (NTP, a component of the United States Department of Health and Human Services) issued its *12th Report on Carcinogens* (Report). The Report makes clear that any glass fibers that have been successfully assessed in an animal study and shown no cancer hazard are NOT among those "certain" fibers and NOT listed in the Report.

The glass fibers comprising the products on this MSDS have either been successfully assessed by appropriate animal protocols and / or have modeled Kdis values such that they are considered non-durable and the current human and animal research that shows no association between inhalation exposure to dust from fiber glass wool and the development of respiratory disease is applicable to these fibers.

Section 12 - Ecological Information

Ecotoxicity

A: General Product Information

No data available for this product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Antimony trioxide (may be in facing or adhesive) (1309-64-4)

96 Hr LC50 Pimephales promelas: 833.0 mg/L; 96 Hr LC50 Lepomis macrochirus: 530 mg/L; 96 Hr LC50 Brachydanio rerio: >1000 mg/L [static]
72 Hr EC50 Selenastrum capricornutum: 67 mg/L
7 Hr EC50 Pseudomonas putida: >3.5 mg/L
48 Hr EC50 Daphnia magna: >1000 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.

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 311/312: 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).

Antimony trioxide (may be in facing or adhesive) (1309-64-4)

CERCLA: 1000 lb final RQ; 454 kg final RQ

State Regulations**A: General Product Information**

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

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 |
|--|-----------|-----|----|-----|-----|-----|-----|
| Antimony trioxide (may be in facing or adhesive) | 1309-64-4 | 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.

| Component | CAS # |
|--|---------------|
| Fiber glass wool | Not Available |
| Antimony trioxide (may be in facing or adhesive) | 1309-64-4 |

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 | Not Available | 1 % (related to Fibrous glass) |

WHMIS Classification

Controlled Product Classification: D2A

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.

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| Section 16 - Other Information |
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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 |
|----------|-------------|--|
| 03/11/02 | 1021-1.0000 | New Products. |
| 06/14/02 | 1021-1.0001 | Sect. 1 Trade Names: Added trade names (total of 21). |
| 11/18/02 | 1021-1.0002 | Sect. 1: RID changed to BID. Added 5 trade names. Sect. 11 updated FGW to IARC Grp. 3. |
| 02/12/03 | 1021-1.0003 | Sect. 1, trade names: added "Formaldehyde-free" to trade names that are also sold with UPF binder (see MSDS 1010). |
| 06/30/03 | 1021-1.0004 | Sect. 10 Correction: remove hydrogen cyanide as possible product of burning of insulation binder. |
| 10/27/03 | 1021.1.0005 | Section 1 added Kraft-Faced MR Insulation. |
| 11/26/03 | 1021-1.0006 | Section 16 division change from RID to BID |
| 02/13/04 | 1021-1.0007 | Section 3 added 'blue kraft' to appearance. Regulatory update. Minor edits. |
| 03/23/05 | 1021-1.0008 | Sect. 1, trade name removals: Best-Pak; ComfortTherm; Commercial BI, Formaldehyde-free; DuctWrap Roll; EasyFit; FGBI, Formaldehyde-free; Foil Faced Batts; High Density Blowing Wool; Kraft Faced Batts; Kraft Faced MR Insulation; Microlite L; Micro-Pak; Mobinsul; Multi-Purpose Insulation; Pan Insul; Rich R Blowing Wool; Thermal/Accoustical Batts and Rolls; UMBI; Unfaced Sound Control Batts; RBI, Formaldehyde-free; PEBS Blanket; & High Performance Batts. Basement Wall Insulation was changed to Basement Wall Insulation, Faced. Panel-Deck was changed to Panel-Deck FSK-25 and Panel-Deck PSK. |
| 04/05/05 | 1021-1.0009 | Sect. 1 addition of Insul-SHIELD, Faced Boards. Sect. 2 addition of carbon black. |
| 06/24/05 | 1021-1.0010 | Sect. 2 minor edit to composition |
| 03/10/08 | 1021-1.0011 | Removed Insul-SHIELD®, Faced Boards from trade names. SDS updated to GHS format. |
| 11/23/09 | 1021-1.0012 | Addition of Hi-Lo Temp® Formaldehyde Free Fiber Glass Insulation |
| 12/31/12 | 1021-1.0013 | Inserts to trade names. |
| | 1021-1.0014 | Updated regulatory information in section 11. |
| 01/03/13 | 1021-1.0015 | Update trade names. |

End of Sheet 1021