

Section 1 - Product and Company Identification

Hazard Label CAUTION label

Company InformationJohns Manville
Insulation Systems
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:** GL-10; GL-30; GL-PD; GL-VR**Use:** These products may be used as a facing for fiberglass batt insulation, duct wrap or duct board products.**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 released from cutting this product.

Skin

Not expected under normal conditions of use.

Ingestion

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

Eyes

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

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	Kraft paper	30-50
7429-90-5	Aluminum foil	18-66
Not Available	Polypropylene film	18-42
Not Available	Continuous filament glass fibers	7-14
1163-19-5	Decabromodiphenyl oxide (present in adhesive)	7-11
1309-64-4	Antimony trioxide (present in adhesive)	<2
14808-60-7	Crystalline silica (may be present in adhesive)	<0.2

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

Flame retardant vapor barrier facing consisting of aluminum foil, fiberglass reinforcing yarn and natural kraft paper laminated together with a flame retardant adhesive.

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.

First Aid: Skin

Wash gently with soap and water to remove dust. Should irritation persist, seek medical attention.

First Aid: Ingestion

Rinse mouth with water to remove dust 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: 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.

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.

Section 6 - Accidental Release Measures**Clean-Up Procedures**

Pick up large pieces. Vacuum dusts.

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

B: Component Exposure Limits**Aluminum foil (7429-90-5)**

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

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

ACGIH: 1 mg/m³ TWA (respirable fraction)

Crystalline silica (may be present in adhesive) (14808-60-7)

OSHA: 0.1 mg/m³ TWA (respirable dust)

((250)/(%SiO₂ + 5) mppcf TWA (respirable)); ((10)/(%SiO₂ + 2) mg/m³ TWA (respirable));

((30)/(%SiO₂ + 2) mg/m³ TWA (total dust))

ACGIH: 0.025 mg/m³ TWA (respirable fraction)

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 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 concentrations exceed the applicable exposure limits. Operations such as sawing, blowing, tear out, and spraying may generate airborne dust 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.

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:	Foil-faced paper with fibrous glass reinforcement	Odor:	No significant odor
Physical State:	Solid	pH:	Not applicable
Vapor Pressure:	Not applicable	Vapor Density:	Not applicable
Boiling Point:	Not applicable	Melting Point:	420°F
Solubility (H₂O):	Not soluble	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**

If dust evolves from this product during use it may cause temporary mechanical irritation or scratchiness of the throat and/or itching of the eyes and skin.

B: Component Analysis - LD50/LC50**Decabromodiphenyl oxide (present in adhesive) (1163-19-5)**

Inhalation LC50 Rat: >48.2 mg/L/1H; Oral LD50 Rat:>2000 mg/kg; Dermal LD50 Rabbit:>2000 mg/kg

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

Oral LD50 Rat: >34600 mg/kg

Crystalline silica (may be present in adhesive) (14808-60-7)

Oral LD50 Rat: 500 mg/kg

Component Carcinogenicity**Aluminum foil (7429-90-5)**

ACGIH: A4 - Not Classifiable as a Human Carcinogen

Continuous filament glass fibers

ACGIH: A4 - Not Classifiable as a Human Carcinogen (listed under Synthetic Vitreous Fibers)
IARC: Group 3 - Not Classifiable (IARC Monograph 81 [2002] (listed under Man-made mineral fibres), Monograph 43 [1988])

Decabromodiphenyl oxide (present in adhesive) (1163-19-5)

IARC: Group 3 - Not Classifiable (IARC Monograph 71 [1999], Monograph 48 [1990])

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

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

Crystalline silica (may be present in adhesive) (14808-60-7)

ACGIH: A2 - Suspected Human Carcinogen
NTP: Known Human 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

Continuous Filament Glass Fiber: No chronic health effects are known to be associated with exposure to continuous filament fiber glass. Results from epidemiologic studies have not shown any increases in respiratory disease or cancer. The International Agency for Research on Cancer (IARC) has classified continuous filament fiber glass as a Group 3 substance, not classifiable as to its carcinogenicity to humans. Because of the large diameter of continuous filament fibers, these products are not considered respirable.

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.

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

No data available for this product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity**Decabromodiphenyl oxide (present in adhesive) (1163-19-5)**

72 Hr EC50 *Skeletonema costatum*: >1 mg/L

Antimony trioxide (present in adhesive) (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

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).

Aluminum foil (7429-90-5)

SARA 313: 1.0 % de minimis concentration (dust or fume only)

Decabromodiphenyl oxide (present in adhesive) (1163-19-5)

SARA 313: 1.0 % de minimis concentration

Antimony trioxide (present in 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
Aluminum foil	7429-90-5	Yes	No	Yes	Yes	Yes	Yes
Decabromodiphenyl oxide (present in adhesive)	1163-19-5	No	No	Yes	Yes	Yes	Yes
Antimony trioxide (present in adhesive)	1309-64-4	Yes	No	Yes	Yes	Yes	Yes
Crystalline silica (may be present in adhesive)	14808-60-7	No	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 #
Antimony trioxide (present in adhesive)	1309-64-4
Crystalline silica (may be present in adhesive)	14808-60-7

A: TSCA Status

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

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
Aluminum foil	7429-90-5	1 %
Continuous filament glass fibers	Not Available	1 % (related to Fibrous glass)
Antimony trioxide (present in adhesive)	1309-64-4	1 %

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.

Section 16 - Other Information**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	1026-1.0000	New MSDS authoring system.
11/06/03	1026-1.0000	Regulatory review. Minor edits.
11/13/03	1026-1.0001	Section 2, obsolete product names removed
12/09/03	1026-1.0002	Section 16 division change from RID to BID
04/08/05	1026-1.0003	Sect. 1 Addition of Radiant Barrier.
11/18/05	1026-1.0004	Regulatory update. Minor edits in Section 8 Exposure, Section 15 SARA/CERCLA and WHMIS.
11/30/05	1026-1.0005	Addition of DBDO to composition.
01/15/07	1026-1.0006	Section 15 TSCA 12b removal of DBDO. These products are articles under TSCA and DBDO does not need to be reported under TSCA 12b per 40CFR §707.60(b).
02/20/07	1026-1.0007	Removed Radiant Barrier from trade names.
05/01/2008	1026-1.0008	Regulatory update. SDS updated to GHS format. Removed the following trade names: 35 RCX-NR, FSK-35RCL, FSK-35TLL, FSK-35RCX, and FSK-35RC50X. Added FSK-50TL to trade names.
10/05/09	1026-1.0009	Regulatory update. Moved products that do not contain DBDO to SDS 1085.

End of Sheet 1026