

Section 1 - Product and Company Identification

Hazard Label WARNING 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:**Uncured Liquid Filter Media;
Uncured Microlite® AA;Uncured Microlite® B;
Water Repellent Microlite® AA Uncured**Section 2 - Composition / Information on Ingredients**

CAS #	Component	Percent
Not Available	Fiber Glass Wool	65-90
Not Available	Non-woven facings	<25*
Not Available	Melamine phenol-formaldehyde binder	10-35**
Not Available	Urea extended phenol-formaldehyde binder	10-35**
Not Available	Silicone Emulsion (present in Water Repellent Microlite® AA Uncured products only)	1-10
7664-41-7	Ammonia (May be released during the curing process)	<0.1
50-00-0	Formaldehyde (May be released during the curing process)	<0.1
108-95-2	Phenol (May be released during the curing process)	<0.1

* Uncured Filter Media is backed with non-fibrous glass synthetic backing.

** Binder may be either of these.

Water Repellent Microlite® AA Uncured includes both ORP and WRP forms.

Section 3 - Hazards Identification**Emergency Overview**

APPEARANCE AND ODOR: Orange or white to pinkish fibrous glass blanket. Phenol/formaldehyde odor.

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

Potential Health Effects**Summary**

Breathing dust from this product may cause a scratchy throat, congestion, and slight coughing. Getting dust or fibers on the skin, or in the eyes may cause itching, rash, or redness. Additional health and safety information is provided in Section 11 of this material safety data sheet.

In high temperature applications, treatment, curing, or in geographic areas of high heat and humidity, this product may release gases irritating to the eyes, nose and throat.

Inhalation

Irritation of the upper respiratory tract, coughing, and congestion may occur in extreme exposures. Severe irritation of the mouth, nose, and throat, as well as signs of central nervous system depression (drowsiness, dizziness, headache), may occur upon inhalation of vapors or gases.

Skin

Temporary irritation (itching) or redness may occur. Skin irritation may result from contact with vapors, or prolonged contact with uncured product.

Absorption

Although phenol can be absorbed through unprotected skin, the amount of free phenol in this product should not cause any adverse effects. Absorption of phenol may result in paleness, weakness, sweating, headache, and ringing in the ears. Severe exposures may result in shock, collapse, coma, convulsions, cyanosis (skin turning blue), and death. Formaldehyde is a skin sensitizer and may lead to an allergic reaction in some individuals.

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. Exposure to vapors generated during the curing process may cause irritation and burning in eyes.

Ears

Temporary irritation (itching) or redness may occur.

Primary Routes of Entry (Exposure)

Inhalation (breathing dust, fibers, or vapors), skin, and eye contact.

Target Organs

Throat, upper respiratory passages, lungs, skin, eyes, liver, and kidneys.

Medical Conditions Aggravated by Exposure

Pre-existing chronic eye, skin, respiratory, liver, or kidney diseases or conditions

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 and fibers. 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

Irritating gases may be released under conditions of high heat or humidity. At high levels, these could cause severe upper respiratory and eye irritation. Formaldehyde gas is a skin and respiratory sensitizer. Treatment should be directed toward removing the source of irritation with symptomatic treatment as necessary.

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.

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 and in original packaging. Storage of uncured fiber glass in hot, unventilated warehouse can result in the release and accumulation of highly irritating gases.

Section 8 - Exposure Controls / Personal Protection

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

Phenol (May be released during the curing process) (108-95-2)

ACGIH: 5 ppm TWA

Skin - potential significant contribution to overall exposure by the cutaneous route

OSHA: 5 ppm TWA; 19 mg/m³ TWA

Prevent or reduce skin absorption

Ammonia (May be released during the curing process) (7664-41-7)

ACGIH: 25 ppm TWA

35 ppm STEL

OSHA: 35 ppm STEL; 27 mg/m³ STEL

Formaldehyde (May be released during the curing process) (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)

PERSONAL PROTECTIVE EQUIPMENT**Personal Protective Equipment: Eyes/Face**

Safety goggles are recommended to keep dust, fibers, gases, and vapors 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

During prolonged contact with wet, uncured product, impervious gloves (butyl rubber and vitron-fluorocarbon rubber) should be worn to prevent excessive skin contact with phenol. Barrier creams may help reduce skin contact and irritation caused by fiber glass, but may be ineffective against formaldehyde vapors that may be released during curing.

Personal Protective Equipment: Respiratory

A NIOSH-approved respirator should be used if ventilation is unavailable, or is inadequate for keeping 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, 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 warm 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:	Orange or white to pinkish.	Odor:	Phenol/Formaldehyde odor
Physical State:	Solid; fibrous blanket	pH:	Not applicable
Vapor Pressure:	Not applicable	Vapor Density:	Not applicable
Boiling Point:	Not applicable	Melting Point:	>649°C/1200°F
Solubility (H₂O):	Variable	Specific Gravity:	Variable
Freezing Point:	Not applicable	Evaporation Rate:	Not applicable
Percent Volatile:	Variable	VOC:	Not determined

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

These products are not reactive.

Hazardous Decomposition

The decomposition products from this material are those that would be expected from any organic (carbon-containing) material, and are mainly derived from pyrolysis, or burning, of the resin. These decomposition products may include carbon monoxide, carbon dioxide, carbon particles, and traces of hydrogen cyanide. Formaldehyde gas may also be released during decomposition.

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.

Gases released under conditions of high heat and humidity can cause severe eye and respiratory irritation.

B: Component Analysis - LD50/LC50**Phenol (May be released during the curing process) (108-95-2)**

Oral LD50 Rat: 317 mg/kg; Dermal LD50 Rat: 525 mg/kg; Dermal LD50 Rabbit: 630 mg/kg

Ammonia (May be released during the curing process) (7664-41-7)

Inhalation LC50 Rat: 5.1 mg/L/1H; Inhalation LC50 Rat: 2000 ppm/4H; Oral LD50 Rat: 350 mg/kg

Formaldehyde (May be released during the curing process) (50-00-0)

Inhalation LC50 Rat: 0.578 mg/L/4H; Inhalation LC50 Rat: 250 ppm/4H; Oral LD50 Rat: 100 mg/kg; Dermal LD50 Rabbit: 270 mg/kg

Carcinogenicity**A: General Product Information**

No additional information available.

B: Component Carcinogenicity**Fiber Glass Wool**

ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans

NTP: Reasonably Anticipated To Be A Carcinogen (respirable size)

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

Phenol (May be released during the curing process) (108-95-2)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

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

Formaldehyde (May be released during the curing process) (50-00-0)

ACGIH: A2 - Suspected Human Carcinogen

OSHA: 0.5 ppm Action Level; 0.75 ppm TWA; 2 ppm STEL (Irritant and potential cancer hazard - see 29 CFR 1910.1048)

NTP: Known to Cause Cancer

IARC: Group 1 - Known Human Carcinogen (IARC Monograph 88 [2006], Monograph 62 [1995], Supplement 7 [1987])

Chronic Toxicity

Exposure to formaldehyde gas (released under conditions of high heat or humidity) may cause eye and upper respiratory irritation, and possible respiratory or skin sensitization (allergy). If sensitization occurs, subsequent exposures to formaldehyde may worsen asthma or other respiratory problems, and cause allergic-type reactions.

Exposure to formaldehyde gas has been associated with the development of nasopharyngeal cancer in laboratory animals and humans. Formaldehyde has been classified as a known human carcinogen, Group 1, by the International Agency for Research on Cancer (IARC). The US Occupational Safety and Health Administration (OSHA) and the US National Toxicology Program (NTP) consider formaldehyde as known to cause cancer. OSHA specifically regulates formaldehyde under 29 CFR 1910.1048.

Phenol, present in the uncured product and in vapors generated during the curing process, may be absorbed through unprotected skin. Absorption of phenol may result in paleness, weakness, sweating, headache, convulsions, cyanosis (skin turning blue), and, in extreme cases, death.

Fiber Glass Wool: 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. This is a reversal of the IARC finding in 1987 of a Group 2B designation (possibly carcinogenic to humans) based on earlier studies in which animals were injected with large quantities of fiber glass. NTP and ACGIH have not yet reviewed the IARC reclassification or the most current fiber glass health research; at this time, both agencies continue to classify glass wool based on the earlier animal injection studies.

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

No additional information available.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity**Phenol (May be released during the curing process) (108-95-2)**

96 Hr LC50 Pimephales promelas: 24 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 8.9 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 23.88 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 5-12 mg/L [flow-through]; 96 Hr LC50 Poecilia reticulata: 40 mg/L [static]; 96 Hr LC50 Brachydanio rerio: 27.8 mg/L

96 Hr EC50 Selenastrum capricornutum: 150 mg/L

5 min EC50 Photobacterium phosphoreum: 28.8 mg/L; 15 min EC50 Photobacterium phosphoreum: 31.6 mg/L; 5 min EC50

Photobacterium phosphoreum: 23.28 mg/L; 15 min EC50 Photobacterium phosphoreum: 25.61 mg/L; 30 min EC50

Photobacterium phosphoreum: 21-36 mg/L

48 Hr EC50 water flea: 23.0 mg/L; 48 Hr LC50 Daphnia magna: 13 mg/L

Ammonia (May be released during the curing process) (7664-41-7)

96 Hr LC50 Cyprinus carpio: 1.1 mg/L; 96 Hr LC50 Lepomis macrochirus: 0.26-4.6 mg/L; 96 Hr LC50 Pimephales promelas: 0.73-2.35 mg/L; 96 Hr LC50 Poecilia reticulata: >1.5 mg/L

5 min EC50 Photobacterium phosphoreum: 2.0 mg/L (15 °C)

48 Hr EC50 Daphnia magna: 25.4 mg/L

Formaldehyde (May be released during the curing process) (50-00-0)

5 min EC50 Photobacterium phosphoreum: 9.0 mg/L; 15 min EC50 Photobacterium phosphoreum: 7.26 mg/L; 25 min EC50 Photobacterium phosphoreum: 6.81 mg/L; 30 min EC50 Photobacterium phosphoreum: 16.5 mg/L; 1 Hr EC50 Vibrio harveyi: 1.2 mg/L; 5 Hr EC50 Vibrio harveyi: 3.7 mg/L; 72 Hr EC50 Colpoda aspera: 5.39 mg/L

96 Hr EC50 water flea: 20 mg/L; 48 Hr EC50 Daphnia magna: 2 mg/L

Section 13 - Disposal Considerations**US EPA Waste Number & Descriptions****General Product Information**

Cure materials prior to disposal to minimize residual resin content. After curing, comply with applicable federal, state, and local regulations for disposal. Product characterization after use is recommended to ensure proper disposal under federal and/or state requirements. If you are unsure of the regulations, contact your local Public Health Department or the local office of the Environmental Protection Agency (EPA).

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. 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).

Phenol (May be released during the curing process) (108-95-2)

SARA 302: 500 lb lower threshold TPQ; 10000 lb upper threshold TPQ

CERCLA: 1000 lb final RQ; 454 kg final RQ

Ammonia (May be released during the curing process) (7664-41-7)

SARA 302: 500 lb TPQ

CERCLA: 100 lb final RQ; 45.4 kg final RQ

Formaldehyde (May be released during the curing process) (50-00-0)

SARA 302: 500 lb TPQ

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.

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
Fiber Glass Wool (¹related to Mineral wool fiber) (²related to Fibrous glass)	Not Available	Yes¹	No	Yes¹	Yes	Yes²	Yes¹
Phenol (May be released during the curing process)	108-95-2	Yes	No	Yes	Yes	Yes	Yes
Ammonia (May be released during the curing process)	7664-41-7	Yes	No	Yes	Yes	Yes	Yes
Formaldehyde (May be released during the curing process)	50-00-0	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 (¹related to Mineral wool fiber)	Not Available
Formaldehyde (May be released during the curing process)	50-00-0

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 based on the IARC Group 1 classification for formaldehyde.

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	1008-1.0000	New MSDS authoring system.
11/01/00	1008-1.0100	LOLI update, minor.
9/17/01	1008-1.0200	Sect. 1: updated product identifier and warning label number.
12/16/01	1008-2.0000	Update Sections 3, 11 & 15 for IARC 2001 re-classification of fiber glass wool to Group 3, not classifiable as to carcinogenicity to humans.
04/10/04	1008-2.0001	Minor edits.
05/01/03	1008-20002	Sect. 3 & 8, correct colors.
07/16/03	1008-2.0003	Sect. 3: correct typo.
10/22/03	1008-2.0103	Section 15, TSCA 12b, add Phenol
04/23/04	1008-2.0104	Sect. 13 update waste info. Regulatory update. Minor edits.
07/02/04	1008-2.0105	Sect. 11 formaldehyde IARC update from 2A to 1. Sect. 1 Label ID edit.
07/13/05	1008-2.0106	Regulatory updates in Sections 8,11,12,13, & 15.
09/10/07	1008-2.0207	Regulatory updates throughout. Addition of Water Repellent Microlite® AA Uncured to trade names.
09/07/2011	1008-2.208	Regulatory Update.

This is the end of MSDS # 1008