



Material Safety Data Sheet

Material Name: Fire Resistant Mineral Wool Insulation

Section 1 - Chemical Product and Company Identification

Product Names: MinWool-1200® Industrial Board, MinWool-1200® Flexible Batt, MinWool-1200® Pipe, MinWool-1200® Pipe and Tank Wrap, MinWool® Sound Attenuation Fire Batt, MinWool® Safing, MinWool® Curtainwall, MPT® Pre-Formed Pipe Insulation, MPT® Field Pre-Formed Pipe Insulation, MPT® Metal Mesh Blanket, MPT® Precision Cut Pipe Insulation, MPT® Mitered Fittings, and MPT® Deck Plug Fire Stop

Manufacturer Information
Industrial Insulation Group, LLC
2100 Line Street
Brunswick, GA 31520

Chemical or Medical Emergency call INFOTRAC (24/7) 1-800-553-5053
Outside the US call collect +1-352-323-3500

Section 2 - Composition and Information on Ingredients

CAS#	EINECS	Component	Percent	OSHA PEL	ACGIH TLV	NIOSH REL
65997-17-3	266-17-3	Synthetic Vitreous Fiber	95+	1f/cc	1f/cc	NE
25104-55-6	NE	Cured Urea Formaldehyde/Phenol Binder	0 - 5	NE	NE	NE

NE = Not Established

The OSHA and ACGIH recommended exposure level is 1 fiber/cc TWA (fibers longer than 5 µm with diameters less than 3 µm). This recommended PEL, together with recommended work practices and personal protective equipment, were adopted in a Health and Safety Partnership Program (HSPP) agreement in 1999 between OSHA and the North American Insulation Manufacturers Association (NAIMA), of which IIG is a member

Section 3 - Hazards Identification

Emergency Overview: Irritant

Appearance: Fibrous solid, green/yellow/brown.

Odor: Odorless

Warning Statements: This product is an article and under normal conditions of use, this product is not expected to create any unusual emergency hazards. However, cutting, sawing, or abrading may increase the risk of personnel exposure.

Potential Adverse Health Effects

Inhalation of excessive amounts of dust created when fabricating, cutting, or other mechanical alterations of the product may cause temporary upper respiratory irritation and/or congestion, remove affected individual(s) to fresh air. Breathing large amounts of dust or fibers from this product may lead to chronic health effects as discussed in Section 11 of this material safety data sheet.

Skin irritation may be treated by gently washing affected area with soap and warm water.

Eye irritation may be treated by flushing eyes with large amounts of water. If irritation persists, contact a physician.

During initial heat-up to operating temperatures above 350°F (177°C), acrid odor and some smoke may be given off as the organic binders used in the mineral wool insulation begin to decompose. Provide proper ventilation to remove any odor and smoke.

Section 4 - First Aid Measures

First Aid: Inhalation

Remove to fresh air. Drink water to clear throat, and blow nose to remove dust. If irritation persists, get medical attention.

First Aid: Skin

Wash gently with soap and warm water to remove dust. Use a wash cloth to help remove fibers. To avoid further irritation, do not rub or scratch affected areas. Rubbing or scratching may force fibers into the skin. If irritation persists get medical attention. Never use compressed air to remove fibers from the skin. Wash hands before eating or using the restroom.

First Aid: Ingestion

Product is not intended to be ingested or eaten. If this product is ingested, irritation of the gastrointestinal (GI) tract may occur, and should be treated symptomatically. Watch the person for several days to make sure that partial or complete intestinal obstruction does not occur. Do not induce vomiting unless directed to do so by medical personnel. Rinse mouth with water to remove fibers, and drink plenty of water to help reduce the irritation. No chronic effects are expected following ingestion.

First Aid: Eyes

Do not rub or scratch your eyes. Fibers may cause the eye to be scratched. Flush eyes with large amounts of water for at least 15 minutes. If irritation persists, contact a medical professional.

First Aid: Notes to Physician

This product is a mechanical irritant, and is not expected to produce any chronic health effects from acute exposures. Treatment should be directed toward removing the source of irritation with symptomatic treatment as necessary.

Section 5 - Fire Fighting Measures

Flash Point:	Not applicable	Method Used:	Not applicable
Upper Flammable Limit (UFL):	Not applicable	Lower Flammable Limit (LFL):	Not applicable
Auto Ignition:	Not determined	Flammability Classification:	Non combustible
Rate of Burning:	Not applicable		

General Fire Hazard:

There is no potential for fire or explosion.

Extinguishing Media:

Use any extinguishing media appropriate for the surrounding fires.

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 produced by other materials.

Hazardous Combustion Products

Primary combustion products are carbon monoxide, carbon dioxide, ammonia, and water. Other undetermined compounds could be released in small quantities.

Section 6 - Accidental Release Measures

Containment Procedures

Pick up large pieces. Vacuum dusts. If sweeping is necessary, use a dust suppressant such as water. Do not dry sweep dust accumulation or use compressed air for clean-up. These procedures will help to minimize potential exposures. This material will sink and disperse along the bottom of waterways and ponds. It can not easily be removed after it is waterborne; however, the material is non-hazardous in water.

Clean-Up Procedures

Wastes are not hazardous as defined by the RCRA (40 CFR 261). Comply with state and local regulations for disposal of these products.

Section 7 - Handling and Storage

Handling Procedures

Use protective equipment as described in Section 8 of this material safety data sheet when handling uncontained material. Keep product in its packaging, as long as practicable to minimize potential dust generation. Keep work areas clean. Avoid unnecessary handling of scrap materials by placing them in waste disposal containers and equipment, kept as close to working areas as possible, to prevent release of fibers and dust. Good housekeeping practices should be used to prevent generation and accumulation of dusts. After handling product, wash face and hands before eating, drinking, or smoking.

Storage Procedures

Warehouse storage should be in accordance guide specifications and / or product data sheets. Material should be kept dry, and protected from the elements.

Section 8 - Exposure Control and Personal Protection

General Product Information

Follow all applicable exposure limits and use OSHA-recommended equipment and work practices. A complete copy of these practices can be obtained from IIG MinWool LLC (see Section 1 of this Material Safety Data Sheet), and is also available on the OSHA website (<http://www.osha.gov/SLTC/syntheticmineralfibers>).

Personnel Protective Equipment

Personal Protective Equipment: Eyes/Face

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

Personal Protective Equipment: Skin

Leather or cotton gloves should be worn to prevent skin contact and irritation. Barrier creams may also be used to reduce skin contact and irritation caused by mineral wool fibers. Normal work clothing (long sleeved shirts and long pants) is recommended. Skin irritation is known to occur chiefly at the pressure points such as around the neck, wrists, waist and between the fingers.

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. In those cases, use a NIOSH-certified disposable or reusable particulate respirator with an efficiency rating of N95 or higher (under 42 CFR 84) when working with this product. For exposures up to five times the established exposure limits use a quarter-mask respirator, rated N95 or higher; and for exposures up to ten times the established exposure limits use a half-mask respirator (e.g., MSA's DM-11, Racal's Delta N95, 3M's 8210), rated N95 or higher. 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 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, while the design of specific ventilation systems should be conducted by a professional engineer.

Personal Protective Equipment: General

Loose-fitting, long-sleeved clothing should be worn to protect the skin from irritation. Exposed skin areas should be washed with soap and warm water after handling.

Section 9 - Physical & Chemical Properties

Appearance: Fibrous semi-circle, blanket, or board insulation.

Odor:	Organic	pH:	8
Physical State:	Solid	Vapor Density:	Not applicable
Vapor Pressure:	Not applicable	Melting Point:	>2100°F
Boiling Point:	Not applicable	Specific Gravity:	Not determined
Solubility (H₂O):	Nil	Freezing Point:	Not applicable
Viscosity:	Not applicable	Evaporation Rate:	Not applicable
VOC:	0	Percent Volatile:	0

Section 10 - Chemical Stability & Reactivity Information

Chemical Stability

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

Hazardous Decomposition

None.

Hazardous Polymerization

Will not occur.

Incompatible Materials

This product reacts with hydrofluoric acid.

Hazardous Decomposition Products

Primary combustion products are carbon monoxide, carbon dioxide, ammonia, and water. Other undetermined compounds could be released in small quantities.

Section 11 - Toxicological Information

Carcinogenicity

OSHA, NTP, IARC, and ACGIH have not classified this product in its entirety as a carcinogen. In October 2001 the IARC concluded its re-evaluation of the carcinogenic risk of mineral wool fibers. The result was a reclassification of the fibers from Group 2B (possibly carcinogenic to humans) to Group 3 (not classifiable as to the carcinogenicity to humans). Epidemiological studies published during the 15 years prior to the 2001 IARC review provide no evidence of increased risk of cancer from occupational exposure during manufacture or use of mineral wool fiber. Reference IARC Volume 81, 2002.

ACGIH: A3 - animal carcinogen (related to rock wool fibers) with unknown relevance to humans.

IARC: Group 3; Volume 81, 2002 Man-Made Vitreous Fibers, Not Classifiable.

Section 12 - Ecological Information

This product should not have any impact on the environment.

Section 13 – Disposal Considerations

Wear proper PPE found in Section 8. This product, is not regulated as a hazardous waste by the U.S. EPA under RCRA regulations. Comply with state and local regulations for disposal.

Section 14 - Transport Information

Follow the precautions indicated in the Handling and Storage Section, Section 7

US DOT Classification for highway: Not regulated

IATA/ICAO Shipping Description: Not regulated

IMO Shipping Description: Not regulated.

Section 15 - Regulatory Information

SARA Hazard Notification/Reporting

Immediate = NO Fire = NO Sudden Release of pressure = NO

Delayed = NO Reactive = NO

SARA Title 313, Toxic chemicals: None

Extremely hazardous substance (EHS): None

SARA/OSHA Hazardous chemical reporting quantity (RQ): None

TSCA: None

RCRA Hazardous waste: None

WHMIS: D2B Irritant

EINECS: Irritant

Hazard symbols: Irritant, X

Risk phrases: R20, Harmful by inhalation; R22, Harmful if swallowed; R36, Irritating to eyes; and R37, irritating to the respiratory system.

Safety phrases S2, Keep out of reach of children, S36, Wear suitable protective clothing; S39, Wear eye/face protection; and S51, Use only in well-ventilated areas.

Cured Urea Formaldehyde/Phenol is covered under TSCA.

Cured Urea Formaldehyde/Phenol is listed in the states of CA, MA, MN, and PA.

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.

Canada Workplace Hazardous Materials Information System (WHMIS)

WHMIS Classification: D2B– Irritant

Product classified as a manufactured article as defined in Hazardous Product Act (HPA), Section 11(1). Section 12(I) exempts it from the WHMIS supplier label and MSDS requirements of the Act.

Section 16 - Other Information

<u>NFPA</u>	<u>HMIS</u>	<u>Rating Scale</u>
1 - Health	1 - Health	0 Least
0 - Flammability	0 - Flammability	1 Slight
0 - Instability	0 - Reactivity	2 Moderate
No Special	E - PPE	3 High
		4 Severe

Information about "Health and Safety Research on Rock- and Slag-wool" can be obtained from the North American Insulation Manufacturers Association (NAIMA), 44 Canal Center Plaza, Suite 310, Alexandria, VA 22314, or on the web at <http://www.naima.org>

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR

Key/Legend:

EPA = Environmental Protection Agency; **TSCA** = Toxic Substance Control Act; **ACGIH** = American Conference of Governmental Industrial Hygienists; **IARC** = International Agency for Research on Cancer; **NIOSH** = National Institute for Occupational Safety and Health; **NTP** = National Toxicology Program; **OSHA** = Occupational Safety and Health Administration; **NFPA** = National Fire Protection Association; **HMIS** = Hazardous Material Identification System; **RCRA** = Resource Conservation and Recovery Act; **CERCLA** = Comprehensive Environmental Response, Compensation and Liability Act; **SARA** = Superfund Amendments and Reauthorization Act; **DSL** = Canadian Domestic Substance List; **EINECS** = European Inventory of New and Existing Chemical Substances; **WHMIS** = Workplace Hazardous Materials Information System; **CAA** = Clean Air Act; **CHPA**=Canadian Hazardous Product Act; **IDL**=Canadian Hazardous Disclosure List

Revision Summary:

This is a revised MSDS which replaces Revision 1.0.8 Minor wording revision with new logo. Get this and other MSDS forms electronically via internet: <http://www.iig-llc.com>.

DISCLAIMER: Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Industrial Insulation Group, LLC (company) makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will the company be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers.

Prepared by IIG Technical Services.