



MATERIAL SAFETY DATA SHEET

MATERIAL NAME: MINERAL WOOL INSULATION

1. Identification:

- 1.1 Product Generic Name: Mineral Wool Insulation
- 1.2 Product Use: Commercial and Industrial Insulation
- 1.3 Products:
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|--------------------------|---------------------------------------|
| COREPLUS 1200 | COREPLUS 1200 Pipe Fitting Insulation |
| Industrial Board | Drainage Media |
| Industrial Flex Batt | MB Plus |
| Marine Board and Flex | Curtain Wall |
| F 110C | Cavity Wall Board |
| T & P Fab Board | Sound Attenuation Fire Batt |
| Fabrication Board | Safing Insulation |
| Thermawrap Insulation | OEM Insulation |
| Pipe and Tank Insulation | Tank Top Insulation |
- 1.4 Company Address: Fibrex Insulations Inc.
561 Scott Rd.
Sarnia, Ontario
N7T 7L4
<http://www.fibrexinsulations.com>
- 1.5 Emergency Phone: (519) 336-7770
(519) 336-8666 (FAX)
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2. Product Ingredients:

<u>Ingredient</u>	<u>CAS Number</u>	<u>%</u>
Mineral Fiber	RN 65997-17-3	96-99
Cured Urea Extended Phenol/Formaldehyde Binder	25104-55-6	1-4

3. Hazards Identification:

- 3.1 Appearance: Light yellow or grey board and batt.
- 3.2 Odour: Odourless.
- 3.3 Emergency Overview: Acrid smoke may be generated in a fire.
Exposure to dust may be irritating to eyes, nose, and throat.
- 3.4 Potential Health Effects:
- Inhalation: Temporary irritation of the upper respiratory tract – may result from exposure to dust and fibers.
- Skin Contact: Dust and fibers may cause temporary mechanical irritation to the skin.
- Eye Contact: Dust and fibers may cause temporary mechanical irritation to the eyes.
- Ingestion: Ingestion of this product is unlikely. Should it occur, it may cause gastrointestinal irritation.
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4. First-Aid Measures:

- 4.1 Inhalation: If inhaled, remove the affected person to fresh air. If irritation persists, get medical attention.
- 4.2 Skin Contact: If irritation occurs, do not rub or scratch. Rinse under running water before washing with mild soap and water. If irritation persists get medical attention.
- 4.3 Eye Contact: Flush eyes with water for at least 15 minutes. Do not rub eyes. Seek medical attention if irritation persists.
- 4.4 Ingestion: Ingestion of this product is unlikely. If it does occur, rinse mouth with water to remove fibers. Drinking water may help reduce gastrointestinal irritation. Do not induce vomiting unless directed by a physician.

5. Fire-Fighting Measures:

- 5.1 Extinguishing media: Use any extinguishing media appropriate for the surrounding fire.
- 5.2 Hazardous combustion products: Carbon monoxide, carbon dioxide, ammonia, hydrogen – nitrogen and nitrogen - oxygen compounds.
- 5.3 Fire-fighting Instructions Observe normal fire-fighting procedures. Treat as residential building materials.
- 5.4 Flash point: None
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|-------------------------------------|----------------|-------------------------------------|----------------|
| <u>Upper Flammable Limit (UFL):</u> | Not Applicable | <u>Lower Flammable Limit (LFL):</u> | Not Applicable |
| <u>Autoignition:</u> | Not Applicable | <u>Explosive Properties:</u> | None |
- 5.5 Unusual fire and explosion hazards: May release acrid smoke in a sustained fire: the organic binder will emit toxic fumes and smoke when oxidized. Ventilation is recommended on initial equipment start up.

6. Accidental Release Measures:

- 6.1 Cleanup Procedures: Pick up large pieces. Minimize dust generation during clean-up. Vacuuming is the preferred method. If sweeping, use a dust suppressant to minimize potential exposures.
- 6.2 Containment Procedures: The material will settle out of the air. It can then be picked up or vacuumed and is non-hazardous waste.
- 6.3 Response Procedures: Follow clean-up procedures. Keep unnecessary personnel away.

7. Handling and Storage:

- 7.1 Handling:
- Keep product in package until installation to avoid unnecessary handling and dust generation.
 - Keep work area clean. Place scrap material in suitable containers.
 - Use recommended cleanup procedures to minimize potential exposure.
- 7.2 Storage:
- Store material in dry conditions protected from the elements.



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8. Exposure Controls/Personal Protection:

8.1 Exposure Guidelines:

A. General Product Information: Follow all applicable exposure limits. Local regulations may apply.

B. Component Exposure Limits:

<u>Source</u>	<u>Legal or Recommended Exposure Limit</u>	<u>Exposure</u>
OSHA	1 f / cc TWA (recommended)	For fibers > 5µm with diameter < 3µm
ACGIH	1 f / cc TWA (threshold limit value – TLV)	For fibers > 5µm in length with Diameter < 3µm
OSHA	15 mg / m ³ TWA – PEL (total particulate) 5 mg / m ³ TWA – PEL (respirable particulate)	Inert dust and particulate not otherwise regulated
ACGIH	10 mg / m ³ TWA – TLV (inhalable particulate) 3 mg / m ³ TWA – TLV (respirable particulate)	Particulate not otherwise classified containing no asbestos and < 1% crystalline silica

NOTE: Follow all applicable exposure limits. It is suggested to follow OSHA PEL of 1 f / cc – TWA and OSHA recommended PEL work practices and protective equipment to limit exposure.

8.2 Personal Protective Equipment:

A. Respiratory Dust Protection

Use a 3M Model 8210 or equivalent, NIOSH certified dust respirator with an efficiency rating of N95 or higher. For high humidity environments use a 3M Model 9900 or equivalent.

B. Skin Protection

Wear loose fitting, long sleeved shirts and long pants. Hats and impervious gloves are recommended. Remove fiber from clothes before leaving work to reduce potential skin irritation.

C. Eye Protection

Wear safety goggles or safety glasses with side shield protection. Use of contact lenses is not recommended.

9. Physical and Chemical Properties:

9.1	<u>Appearance:</u>	Grey, green fibrous material
9.2	<u>Physical State:</u>	Solid
9.3	<u>Odour:</u>	Slightly organic
9.4	<u>Boiling Point:</u>	Not Applicable
9.5	<u>Melting Point:</u>	> 2000 °F (1143 °C)
9.6	<u>Vapor Pressure:</u>	Not Applicable
9.7	<u>Vapor Density:</u>	Not Applicable
9.8	<u>Specific Gravity:</u>	Not Applicable
9.9	<u>Evaporation Rate:</u>	Not Applicable
9.10	<u>Freezing Point:</u>	Not Applicable
9.11	<u>Viscosity:</u>	Not Applicable
9.12	<u>Solubility (H₂O)</u>	Insoluble



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10. Stability and Reactivity:

- 10.1 Stability: Stable
- 10.2 Reactivity: Not reactive
- 10.3 Hazardous Decomposition:
Primary combustion products are carbon monoxide, carbon dioxide, ammonia, and water. Other undetermined components could be released in trace quantities. Emission usually occurs in the first heating. Ensure good ventilation and or supply appropriate respirator.
- 10.4 Hazardous Polymerization: Will not occur
- 10.5 Incompatible Materials: Hydrofluoric acid
None others expected
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11. Toxicological Information

- 11.1 Acute Toxicity:
Fibers and dust from mineral wool can cause temporary mechanical irritation of the eyes and upper respiratory tract. Inhalation may cause coughing and nose and throat irritation.
- 11.2 Chronic Toxicity:
In October 2001 the International Agency for Research on Cancer (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.
- 11.3 Evaluation of Potential Carcinogenicity

<u>Source</u>	<u>Classification</u>	<u>Description</u>
IARC	Group 3	Not classifiable as a human carcinogen
ACGIH	Group A3	Animal carcinogen with unknown relevance to humans

12. Ecological Information:

- 12.1 Ecotoxicity: No data available for the products. The material is not expected to cause harm to animals, plants, or fish.
- 12.2 Environmental Fate: No data available for the product.
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13. Disposal Considerations:

- 13.1 U.S. EPA Waste Number and Descriptions:
- 13.2 General Information: The products as supplied, are not expected to be a characteristic hazardous waste under RCRA if discarded.
- 13.3 EPA Waste Numbers: No EPA waste numbers are applicable for their product's components.
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14. Transportation Information:

- 14.1 General Information: No special precautions.
- 14.2 U.S. Dot Information: The product is not classified as a hazardous material for transportation.
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15. Regulatory Information:

15.1 U.S. Federal Regulations:

Toxic Substances Control Act (TSCA):

All components in the product are listed, as required, on the US EPA TSCA inventory, or are not required to be listed.

CERCLA:

Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less; statutory RQ = 1 pound (.454 kg); no final RQ is being assigned to the generic or broad class (related to fine mineral fibers).

Clean Air Act:

Mineral wool fibers appear on the Clean Air Act – 1990 Hazardous Air Pollution List.

15.2 State and Local Regulations:

State, Provincial, and Local regulations not identified in this Material Safety Data Sheet may apply.

15.3 WHMIS:

The products have been classified in accordance with the hazard criteria of the Controlled Product Regulations.

WHMIS IDL:

No components are listed on the IDL.

WHMIS Classifications:

No components are classified as controlled products.

This material is classified Group 3 (not classifiable as to carcinogenicity to humans).

16. Other Information:

- 16.1 Information about "Health and Safety of Rock and Slag Wool," can be obtained from the North American Insulation Manufacturer Association (NAIMA), 44 Canal Center Plaza, Suite 310, Alexandria, VA. 22314, USA. Home page: <http://www.naima.org>

16.2 Acronyms used in the MSDS:

ACGIH: American Conference of Government Industrial Hygienists.

CAS: Chemical Abstract Service.

CERCLA: Comprehensive Environmental Response Compensation and Liability Act.

DOT: Department of Transport.

IARC: International Agency for Research on Cancer.

MSDS: Material Safety Data Sheet.

NAIMA: North American Insulation Manufacturer's Association.

NIOSH: National Institute for Occupational Safety and Health.



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OSHA: Occupational Safety and Health Administration.

PEL: Permissible Exposure Limit.

RCRA: Resource Conservation and Recovery Act.

RQ: Reportable Quantity.

TSCA: Toxic Substance Control Act.

TWA: Time Weighted Average.

TLV: Threshold Limit Value.

LEL: Lower Exposure Limit.

NFPA: National Fire Protection Association.

16.3 NFPA Hazard Ratings:

Health: 1

Flammability: 0

Reactivity: 0

16.4 Accuracy:

The information contained herein is based upon data considered to be accurate and is provided in good faith to comply with applicable federal, state and provincial laws. No warranty or representation of law or fact with respect to such information is intended or given.

Prepared by Fibrex Insulations Inc. , 2003