Section 1 - Chemical Product and Company Identification

Product Name(s): Microwool

Manufacturer: Fibertec Inc.
35 Scotland Boulevard
Bridgewater, MA 02324 U.S.A.

Product Use: Friction Market

Health and Technical Contacts:
Health Issues Information (8am-4pm ET): 508-697-5100
Technical Product Information (8am-4pm ET): 508-697-5100

Emergency Contacts:
(8am-4pm ET): 508-697-5100
Emergencies ONLY (after 4pm ET and weekends):
CHEMTREC (24 hours every day): 1-800-424-9300

Section 2 – Hazards Identification

GHS Classification: (29CFR1910.1200)

Skin Irritation (Category 2)
Eye Irritation (Category 2B)
SPECIFIC Target Organ Toxicity – (Single Exposure) (Category 2)

GHS Label Elements:

Pictogram:

Signal Word: Warning
Section 2 – Hazards Identification (continued)

Hazard Statements:
H315 Causes skin irritation
    Causes eye irritation
H335 May cause respiratory irritation
H371 May cause damage to organs (respiratory system)

Precautionary Statements:
P101+102+103 Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
P260 Do not breathe dust
P264 Wash hands thoroughly after handling
P271 Use only outdoors or in a well ventilated area.
P281 Use personal protective equipment as required
P304+P340+P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call POISON CENTER or physician if you feel unwell.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P337+P313 If skin or eye irritation occurs get medical attention.
P362 Take off contaminated clothing and wash before reuse.
P403+P233 Store in well-ventilated place. Keep container tightly closed.
P501 Dispose of contents in accordance with applicable regulations.

Section 3 – Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>65997-17-3</td>
<td>Mineral Wool</td>
<td>&gt; 95 %</td>
</tr>
<tr>
<td>8012-95-1</td>
<td>Mineral Oil</td>
<td>&lt; 5 %</td>
</tr>
</tbody>
</table>

*As manufactured continuous filament glass fibers are not Respirable. Continuous filament glass products that are chopped, crushed or severely mechanically processed during manufacturing or use may contain a small amount of Respirable particulate, some of which may be glass shards. See section 8 of Safety Data Sheet for exposure limit data.

Component Related Regulatory Information
This product may be regulated, have exposure limits or other information identified as the following: glass wool fiber, fibrous glass and nuisance particulates.

Component Information/Information on Non-Hazardous Components
No additional information available
**Section 4 – First Aid Measures**

**Inhalation:** If inhaled, move the affected person to fresh air. If irritation persists get medical attention.

**Skin Contact** For skin contact, wash with mild soap and cold water. Do not wash with warm water because this will open up the pores of the skin, which will cause further penetration of the fibers. Use a washcloth 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.

**Eye Contact:** Immediately flush eyes with plenty of running water for at least 15 minutes. If irritation persists get medical attention.

**Ingestion:** Ingestion of this material is unlikely. If it does occur, 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. Seek medical attention if irritation persists.

**Section 5 – Fire Fighting Measures**

<table>
<thead>
<tr>
<th>Flash Point:</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point Method:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper Flammability Limit:</td>
<td>None</td>
</tr>
<tr>
<td>Lower Flammability Limit:</td>
<td>None</td>
</tr>
<tr>
<td>Flammability Classification:</td>
<td>Non-flammable</td>
</tr>
</tbody>
</table>

**Extinguishing Media:** Dry chemical, foam, carbon dioxide, and water fog.

**Unusual Fire & Explosion Hazards:** None known.

**Fire-Fighting Instructions:** Use self-contained breathing apparatus (SCBA) and full bunker turnout gear in a sustained fire.

**Hazardous Combustion Products:** Primary combustion products are carbon monoxide, hydrogen, carbon dioxide, ammonia and water. Other undetermined compounds could be released in small quantities.

**Section 6 – Accidental Release Measures**

**Containment Procedures:** This material will settle out of air. If concentrated on land, it can then be scooped up for disposal as non-hazardous waste. This material will sink and disperse along the bottom of waterways and ponds. It cannot easily be removed after it is waterborne; however, the material is non-hazardous in water.

**Clean-Up Procedures:** Scoop up material and put into a suitable container for disposal as a non-hazardous waste. Do not use compressed air for cleaning.

**Response Procedures:** Isolate area. Keep unnecessary personnel away.

**Special Procedures:** None.
Section 7 – Handling and Storage

Handling Procedures: Keep product in its packaging, as long as practicable to minimize potential dust generation. Keep work areas clean. Avoid unnecessary handling of scrap materials. Wear PPE as described in Section 8.

Storage Procedures: No special procedures.

Section 8 – Exposure Controls / Personal Protection

Exposure Guidelines:

A: General Product Information  Follow all applicable exposure limits.

B: Exposure Limits

Fiber Glass (crushed/shredded continuous filament) (65997-17-3)

<table>
<thead>
<tr>
<th>CAS # 65997-17-3</th>
<th>OSHA PEL 8 Hr TWA</th>
<th>ACGIH TLV (8-hr TWA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Respirable fiber and particulate</td>
<td>15 mg/m³</td>
<td>5 mg/M³</td>
</tr>
<tr>
<td>Respirable particulate</td>
<td>5 mg/m³</td>
<td>None Established</td>
</tr>
<tr>
<td>Resp. part. With fiber-like dimensions</td>
<td>None Established</td>
<td>None Established</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS # 8012-95-1</th>
<th>OSHA PEL 8 Hr TWA</th>
<th>ACGIH TLV (8-hr TWA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>As Mist</td>
<td>5 mg/m³</td>
<td>5 mg/M³</td>
</tr>
</tbody>
</table>

Engineering Controls:
There is a possibility of high particulate exposure levels when working with this product. At a minimum, local exhaust and/or general dilution ventilation should be provided as necessary to maintain exposures below regulatory and recommended limits. Dust collection systems should be used in transferring operations, cutting or machining or other dust generating processes because of anticipated dust levels. Vacuum or wet-cleanup methods should be used.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection:
A properly fitted NIOSH approved N 95 series disposable dust respirator such as the 3M model 8210 (model 8271 in high humidity environments) or equivalent must be worn when using this material when dust levels exceed the limits noted above.

Skin Protection:
Normal work clothing (long sleeved shirts and long pants) is recommended. Use gloves. Skin irritation is known to occur chiefly at the pressure points such as around the neck, wrists, waist and between the fingers. Wear tight fitting gloves when dusty conditions exist.

Eyes/Face Protective Equipment:
Wear safety glasses, goggles or face shield to avoid eye irritation.
Section 9 – Physical & Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>White to grey powder</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>Physical State:</td>
<td>Solid</td>
</tr>
<tr>
<td>Ph</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapor pressure (mm)hg@20c:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapor Density Air = 1</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Boiling point:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Solubility</td>
<td>insoluble</td>
</tr>
<tr>
<td>Specific Gravity H2O = 1:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Evaporation Rate (n-Butyl Acetate = 1):</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Melting point</td>
<td>1150 C</td>
</tr>
<tr>
<td>VOC:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

Physical Properties: Additional Information  No additional information available.

Section 10 – Chemical Stability & Reactivity Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability:</td>
<td>This is a stable material.</td>
</tr>
<tr>
<td>Conditions to Avoid:</td>
<td>None known</td>
</tr>
<tr>
<td>Incompatible Materials:</td>
<td>Acids - May give off H2S under certain acidic conditions</td>
</tr>
<tr>
<td>Hazardous Decomposition Products:</td>
<td>None, except in fire. See section 5 for combustion products statement.</td>
</tr>
<tr>
<td>Hazardous Polymerization:</td>
<td>Will not occur</td>
</tr>
</tbody>
</table>
Section 11 – Toxicological Information

Acute Effects:

**General Product Information**  Dusts may cause mechanical irritation to eyes and skin. Ingestion may cause transient irritation of throat, stomach and gastrointestinal tract. Inhalation may cause coughing, nose and throat irritation, and sneezing. People with pre-existing respiratory conditions, may experience difficulty breathing, congestion and chest tightness.

**Acute Data**

- **Oral LD$_{50}$ Rat:** Not determined
- **Dermal LD$_{50}$ Rat:** – Not determined
- **Skin Irritation:** – Mechanical irritant
- **Eye irritation:** - Mechanical irritant

**Component Carcinogenicity**

In October, 2001 the International Agency for Research on Cancer (IARC) classified mineral wool fibers (rock or slag) as Group 3 (not classifiable as to carcinogenicity to humans).

Section 12 – Ecological Information

No data available for this product. This product is not anticipated to harm animals, plants or fish.
Section 13 – Disposal Considerations

EPA Waste Number & Descriptions:

**A: General Product Information**
Material, if discarded, is not expected to be a characteristic hazardous waste under RCRA.

**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 – Transportation Information

**US DOT Information**
- **Shipping Name:** Not regulated for transport.
- **Hazard Class:** None
- **UN/NA #:** None
- **Packing Group:** None
- **Required Label(s):** None

**TDG Information**
- **Shipping Name:** Not regulated for transport.
- **Hazard Class:** None
- **UN/NA #:** None
- **Packing Group:** None
- **Required Label(s):** None
- **Additional Info:** None

**Additional Transportation Regulations:**
No additional information available.
Section 15 – Regulatory Information

A: General Product Information
No additional information available.

B: Component Analysis
No additional information available.

The following is provided to aide in the preparation of SARA 311 and 312 reports.

SARA 311/312
Acute Health Hazard: Yes
Chronic Health Hazard: No
Fire Hazard: No
Sudden Release of Pressure Hazard: No
Reactive Hazard: No

C: Clean Air Act
The following components appear on the Clean Air Act-1990 Hazardous Air Pollutants List:
None

State Regulations:

A: General Product Information
No additional information available

B: Component Analysis – State

The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>State</th>
<th>Component</th>
<th>CAS #</th>
<th>CA</th>
<th>FL</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mineral Wool</td>
<td>CAS # 65997-17-3</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Mineral Oil</td>
<td>CAS # 8012-95-1</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

Other Regulations:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>TSCA</th>
<th>DSL</th>
<th>EINECS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral wool</td>
<td>65997-17-3</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

A: General Product Information Component
No additional information available.

B: Component Analysis – Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>TSCA</th>
<th>DSL</th>
<th>EINECS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil</td>
<td>8012-95-1</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

C: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:
None

WHMIS Classification: All components of this product are included in the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL)
Reasonable care has been taken in the preparation of this information, the manufacturer makes no warranty of
merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no
representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. Final
determination of the suitability of the material for the use contemplated is the sole responsibility of the user. No warranty is
expressed or implied, and the manufacturer’s sole responsibility shall be to replace such quantity of the material proven to
be defective.

Revision Summary:
This is a revised SDS, which replaces Microwool dated 10/10/12 with updated GHS format. Read this information
carefully.

Rev 2 10 October 2012   Revised and updated format
Rev 3  4 April 2015    Revised and updated format
Rev 3 11 April 2018    Reviewed