## Material Safety Data Sheet

### 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>- Product Name (as labeled)</th>
<th>ESLIN Pipe Cover, ESLIN Felt, ESLIN Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Product Identification</td>
<td>Inorganic materials</td>
</tr>
<tr>
<td>- Application</td>
<td>Thermal &amp; anti-sweat insulation for construction &amp; industrial field</td>
</tr>
<tr>
<td>- Manufacturer</td>
<td></td>
</tr>
<tr>
<td>1) Name</td>
<td>Moreens Corporation</td>
</tr>
<tr>
<td>2) Address</td>
<td>254 Donam-dong Yeongcheon-si Gyeongbuk 770-130 Republic of Korea</td>
</tr>
<tr>
<td>3) Telephone</td>
<td>82-54-331-0566 Korea</td>
</tr>
</tbody>
</table>

U.S. Phone Number for Health and Safety Information (888) 984-7776 M-F 8:00 a.m. to 5:00 p.m. HST

### 2. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>- Component</th>
<th>Continuous Filament E-Glass Fiber</th>
</tr>
</thead>
<tbody>
<tr>
<td>- CAS No.</td>
<td>65997-17-3</td>
</tr>
<tr>
<td>- Percentage</td>
<td>84% - 100%</td>
</tr>
<tr>
<td>- Component</td>
<td>Inorganic Binder</td>
</tr>
<tr>
<td>- Percentage</td>
<td>0% - 16%</td>
</tr>
<tr>
<td>- Component</td>
<td>Vapor Retarder Facing for Insulation</td>
</tr>
<tr>
<td>- CAS No.</td>
<td>laminated, continuous filament fibrous glass scrim, &amp; aluminum foil)</td>
</tr>
<tr>
<td>- Percentage</td>
<td>None Assigned, “An Article” per CFR 1910.1200</td>
</tr>
<tr>
<td></td>
<td>&gt; 1%</td>
</tr>
</tbody>
</table>

### 3. Hazards Identification

<table>
<thead>
<tr>
<th>- EC classification</th>
<th>No classification assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Eye contact</td>
<td>Temporary mechanical irritation to the eyes</td>
</tr>
<tr>
<td>- Skin contact</td>
<td>Temporary mechanical irritation to the skin</td>
</tr>
<tr>
<td>- Inhalation</td>
<td>Impossible to inhale but inhalation of fibrous glass dust or fibers may cause mechanical irritation of the mouth nose and throat</td>
</tr>
<tr>
<td>- Ingestion</td>
<td>Not likely to occur through normal use</td>
</tr>
<tr>
<td>- Chronic conditions</td>
<td>None known</td>
</tr>
</tbody>
</table>
4. First Aid Measures

- **Eye contact**
  - Flush with flowing water for 15 minutes or until irritation stops
  - If symptoms persist seek medical attention

- **Skin contact**
  - Flush with ample cool water, followed by washing with mild soap to remove accumulated fibers.

- **Inhalation**
  - Move to fresh air environment. Drink water to clear throat and blow nose to evacuate fibers.

- **Ingestion**
  - Product is not intended to be ingested or eaten. If this product is ingested, irritation of the GI (gastrointestinal) tract may occur, and should be treated symptomatically. Rinse mouth with water to remove fibers, and drink plenty of water to help reduce the irritation. No chronic effects are expected following ingestion.

5. Fire Fighting Measures

- **Flash point & spontaneous ignition point**
  - None

- **Unusual fire & explosion hazards**
  - Not considered flammable or combustible

- **Special classification or regulation according to fire fighting law**
  - None

- **Fire-fighting instructions**
  - Water, dry powder, or foam (needed for packaging only).

- **Hazardous combustion products when burning**
  - None

6. Accidental Release Measures

- **Measures for protection of human body**
  - None

- **Measures for protection of environment**
  - None

- **Method of purification or removal**
  - Collect spilled materials in appropriate container for disposal

7. Handling and Storage

- **Handling**
  - Wear PPE (Personal Protection Equipment) as described in Section 8

- **Storage**
  - Store in dry area without moisture

- **Incompatible material**
  - Not relevant

8. Exposure Control / Personal Protection

Exposure to fibrous glass may cause mechanical irritation to the skin, eyes, nose and throat. Typically such irritation occurs in newly exposed individuals and usually diminishes after several days of exposure.

- **Respiratory protection**
  - If airborne fibrous glass exceeds the regulatory limits, or if upper respiratory irritation occurs, use a respirator designed for nuisance type dust.

- **Eye protection**
  - Not normally required, but as a good safety work practice, suggest the wearing of appropriate eye protection such as safety glasses/side shields or equivalent whenever use of the product releases airborne fibrous glass.
- Skin protection  
Barrier creams, gloves, and long sleeve loose fitting clothing may be required for certain workers who have sensitive skin or contact dermatitis. Work clothing should be laundered separately from other clothing before reuse.

- Ventilation  
Normal area ventilation is sufficient in most cases to keep dust and fiber levels below the TLV or PEL.

9. Physical & Chemical Properties

- Physical state  
Solid
- Form  
E-glass fiber continuous filament
- Colour  
White - Some products have an aluminium foil facing
- Odour  
None
- pH  
Not applicable
- Specific temperature at which changes in physical state occur
  1) Softening point  
1555°F (846°C)
  2) Melting point  
2372°F (1300°C)
- Flash point  
None
- Explosive properties  
None
- Density  
6.87 ~13.73 lb/ft³ (110 ~ 220 kg/m³)
- Solubility  
None

10. Chemical Stability & Reactivity Information

- Stability  
Materials are stable. Aluminum Foil may chemically react to high pH materials such as uncured portland cement in the presence of water.
- Hazardous reactions  
None
- Hazardous decomposition products  
None

11. Toxicological Information

- Acute Toxicity  
Not relevant
- Localised effects  
Possible temporary irritations
- Long term toxicity (Carcinogenicity)  
Not classified as regulated under ACGIH, IARC, NTP, or OSHA. Industry studies have shown textile grade fibrous glass to be a non-carcinogen.

12. Ecological Information

- Not available

13. Disposal Considerations

Classified as a nonhazardous inert waste and disposal may be in unlined land fills for noncritical materials. Dispose according to local, state, and federal laws. This material is not regulated under RCRA hazardous waste regulations.
14. Transportation Information

Not regulated by DOT; not classified by TDG

15. Regulatory Information

CA PROPOSITION 65: Insignificant trace quantity
CERCLA: Not listed
MA RIGHT-TO-KNOW: Less than reportable quantity
SARA TITLE III: Exempt by definition
NJ RIGHT-TO-KNOW: Less than reportable quantity
PA RIGHT-TO-KNOW: Less than reportable quantity
TSCA INVENTORY: Exempt per section 8(a), 710.2(f), and 704.5(a)

Canadian Regulations: WHMIS:D2B
All components of this product are included in the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substance List NDSL

16. Other Information/Abbreviations

ACGIH (U.S.) American Conference of Governmental Industrial Hygienists
CAS (U.S.) Chemical Abstract Service
CERCLA Comprehensive Environmental Response, Compensation and Liability Act
EC Enzyme Classification
EPA (U.S.) Environmental Protection Agency
IARC (Int’l.) International Agency for Research on Cancer
LEL Lower Exposure Limit
N. A. Not Applicable or Not Assigned
NIOSH National Institute of Occupational Safety and Health
NTP (U.S.) National Toxicology Program
OSHA (U.S.) Occupational Safety and Health Administration
PA Pennsylvania Right to Know List of Hazardous Substances
PEL (U.S.) Permissible Exposure Limit
RCRA (U.S.) Resource Conservation and Recovery Act
TDG Transportation of Dangerous Goods Directorate
TLV Threshold Limit Value
TWA Time Weighted Average
TXAIR Texas Air Contaminants with Health Effects Screening Level
UEL Upper Exposure Limit
WHMIS Workplace Hazardous Materials Information System

- The source of document

This document shall be updated according to the Industrial Immediacy hygienic law 41 regulation by the business & development department of Moreens Corporation

Last Revised 10/21/11