Material Safety Data Sheet

LEWCO 1800HTS-1 & 3600HTS-1    Silica Fabric

SECTION I – Component Data

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>ACGIH-TLV</th>
<th>OSHA-PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respirable Dust</td>
<td>N/A</td>
<td>N/A</td>
<td>6 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Total Dust</td>
<td>N/A</td>
<td>10 mg/m³</td>
<td>15 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

**Base Cloth**

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Amorphous Silica</td>
<td>Silicon Dioxide</td>
<td>7831-86-9</td>
<td>10 mg/m³</td>
<td>N/A</td>
</tr>
</tbody>
</table>

There is not an established threshold limit value (TLV) that is directly applicable to this family of silica materials. Chemically, these products are composed of amorphous silica with trace elements of aluminum, uranium, and iron.

The individual filament sizes of the base cloth yarn are nominally 6.0 microns and are considered “non-respirable”. It will partially transform to a cristabloic structure when subjected to steady state temperatures of above 1850 F. In the event that the materials are subject to continuous temperatures exceeding 1850 F, appropriate caution should be exercised. (See Section VI).

SECTION III – Physical Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Percent Volatile by Volume</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Specific Gravity (H₂O=1)</td>
<td>2.1</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg @ 20 C)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor Density (Air=1)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation Rate (Ethyl Ether=1)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Appearance and Odor</td>
<td>Tan colored solid, no odor</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
SECTION IV – Fire and Explosion Hazard Data

Flash Point (Method Used): Not applicable
Auto Ignition Temperature: Not applicable
Flammability Limits (%): LEL: NA UEL: NA
Special Fire Fighting Procedures: Not applicable
Unusual Fire and Explosion: None
Extinguishing Media: Water, foam, carbon dioxide, dry chemical

SECTION IV – Health Hazard Data

Primary Routes of Exposure: Inhalation and skin contact
Health Hazards (Including acute and chronic effects and symptoms of overexposure):

Acute:  
Inhalation: Irritation of dusts and fibers may result in inflammation of the upper respiratory tract (mouth, nose and throat)
Skin Contact: Skin contact with dusts and fibers may produce itching and temporary mechanical irritation.
Eye Contact: Eye contact with dusts and fibers may produce temporary mechanical irritation
Ingestion: Temporary mechanical irritation of the digestive tract. Observe individual if symptoms develop, consult a physician.

Chronic: There are no other known health effects associated with chronic exposure to this product. (See Section I for information regarding Quartz.)

SECTION V – Emergency & First Aid Procedures

Inhalation: Move individual to fresh air. Seek medical attention if irritation persists.
Skin Contact: Wash with mild soap and running water: use a washcloth to help remove dust and fibers. To avoid further irritation do not rub or scratch irritated areas. Rubbing or scratching may force fibers into the skin. Seek medical attention if irritation persists.
Eye Contact: Flush eyes with flowing water for at least 15 minutes. Seek medical attention if irritation persists.
Ingestion: Not applicable
SECTION V – Employee Protection

The following precautions are advisable during cutting and fabrication of the material, or operations that could generate dust of this material:

Ventilation: General dilution ventilation and/or local exhaust ventilation should be provided, as necessary to maintain exposures below PEL’s or TLV’s

Respiratory Protection: A properly fitted NIOSH/MHSA approved disposable dust respirator (TC-21C-132) should be used when: the level of dust in the air exceeds permissible exposure limits; or if irritation occurs. Use respiratory protection in accordance with your company’s respiratory protection program and OSHA regulations under CFR.

Respiratory protection is also recommended if this product is subject to steady state temperatures that exceed the 1850 F. (Use an approved high efficiency air particulate filter)

Eye Protection: Safety glasses, goggles or face shields should be worn whenever materials are being handled.

Protective Clothing: Wear loose fitting, long sleeved shirt and long pants if irritation is experienced. Wear gloves when handling this product.

Work/Hygienic Practices: Handle in accordance with good industrial hygiene and safety practices:

- Avoid unnecessary exposure to dusts and fibers
- Remove dust and fibers from the skin after exposure.
- Be careful not to rub or scratch irritated areas. Rubbing or scratching may force the fibers into the skin. The fibers should be washed off. Use of barrier creams can, in some instances, be helpful.
- Use vacuum equipment to remove fibers and dusts from clothing. Compressed air should never be used. Always wash work clothes separately and wipe out the washer/sink in order to prevent loose dust from getting on other clothes.
- Keep the work area clean of dusts and fibers generated during fabrication. Use vacuum equipment to clean up dusts and fibers. Avoid sweeping or using compressed air as these techniques resuspend dusts and fibers into the air.
- Have access to safety showers and eye wash fountains.
SECTION VII – Reactivity Data

Stability (Conditions to avoid): Product is stable  

Incompatibility (Materials to avoid): Materials are not compatible with the basin phosphates, hydrofluoric acids, some oxides and hydroxides; especially at elevated temperatures.

Hazardous decomposition products: The base fabric will partially transform to a cristobalite structure when subjected to steady state temperatures above 1850 F. In the event it is subjected to continuous temperatures exceeding 1850 F appropriate caution should be exercised. (See Section VI)  
If the material is heated, residual proprietary organic ingredients contained in this product may produce smoke and irritating fumes including carbon monoxide and carbon dioxide.

Hazardous Polymerization: Will not occur.

SECTION VIII – Storage Precautions

Precautions to be taken in handling and storage: No special precautions necessary

SECTION IX – Environmental Protection

Action to take for spills (Use appropriate safety equipment): For solid product, not applicable. For dust and fibers generated during fabrication vacuum up and containerize.

Waste Disposal Method: Dispose in accordance with federal, state, and local regulations as a solid non-hazardous waste.

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