I. PRODUCT INFORMATION

Chemical Name: Mixture
CAS No: None Assigned
Common Name(s): Fiber Glass Acoustical Panels
Product Use: Acoustical Treatment of Wall and Ceiling

II. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name: Glass, oxide, chemicals (wool)
CAS No: 65997-17-3
Common Name: Fibrous glass wool
Percent in Product: 84 – 95% by weight-maximum
Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>OSHA PEL TWA</th>
<th>ACGIH TLV TWA</th>
<th>NIOSH REL TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Nuisance Dust: 15 mg/m³</td>
<td>Synthetic Vitreous Fiber-Glass Wool Fibers: 1 f/cc</td>
<td>Total Glass Dust: 5 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Respirable Nuisance Dust: 5 mg/m³</td>
<td></td>
<td>Respirable Fibers: 3 f/cc</td>
</tr>
<tr>
<td></td>
<td>HSPP Voluntary: 1 f/cc</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>See Section 16 for definitions of respirable fibers.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chemical Name: Urea, polymer with formaldehyde and phenol (cured)
CAS No: 25104-55-6
Common Name: Phenol formaldehyde urea polymer
Percent in Product: 16% by weight-maximum
Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>OSHA PEL</th>
<th>ACGIH TLV-TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
Chemical Name: All Faced product surfaces, glass web and glass fabric contain: Glass, oxide chemicals (textile)
CAS No: 65997-17-3
Common Name: Continuous filament glass fibers
Percent in Product: 16% by weight-maximum
Exposure Limits:

<table>
<thead>
<tr>
<th>Respirable Dust</th>
<th>OSHA PEL</th>
<th>ACGIH TLV-TWA</th>
<th>NIOSH REL</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 mg/m³</td>
<td>5 mg/m³</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total Dust</td>
<td>15 mg/m³</td>
<td>—</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>Respirable Fibers</td>
<td>1 f/cc (proposed)</td>
<td>1 f/cc</td>
<td>3 f/cc</td>
</tr>
</tbody>
</table>

Chemical Name: All painted surfaces except Hygiene products, paint contains: Dolomite
CAS No: 16389-88-1
Common Name: Calcium-Magnesium Carbonate Filler
Percent in Product: 18% by weight-maximum
Exposure Limits:

<table>
<thead>
<tr>
<th>Respirable Dust</th>
<th>OSHA PEL</th>
<th>ACGIH TLV-TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 mg/m³</td>
<td>—</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Total Dust</td>
<td>15 mg/m³</td>
<td>—</td>
</tr>
</tbody>
</table>

Chemical Name: All Hygiene painted surfaces, paint contains: Limestone
CAS No: 1317-65-3
Common Name: Calcium Carbonate Filler
Percent in Product: 8% by weight-maximum
Exposure Limits:

<table>
<thead>
<tr>
<th>Respirable Dust</th>
<th>OSHA PEL</th>
<th>ACGIH TLV-TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 mg/m³</td>
<td>—</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Total Dust</td>
<td>15 mg/m³</td>
<td>—</td>
</tr>
</tbody>
</table>

Chemical Name: All Hygiene painted surfaces, paint contains: Aluminum trihydroxide
CAS No: 21645-51-2
Common Name: Fire retardant
Percent in Product: 8% by weight-maximum
Exposure Limits:

<table>
<thead>
<tr>
<th>Respirable Dust</th>
<th>OSHA PEL</th>
<th>ACGIH TLV-TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 mg/m³</td>
<td>—</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Total Dust</td>
<td>15 mg/m³</td>
<td>—</td>
</tr>
</tbody>
</table>

Chemical Name: Hygiene Advanced surfaces, plastic film contains: Fluoroethene, homopolymer
CAS No: 24981-14-4
Common Name: PVF – Polyvinyl Fluoride Resin
Percent in Product: 2% by weight-maximum
Exposure Limits:

<table>
<thead>
<tr>
<th>None</th>
<th>OSHA PEL</th>
<th>ACGIH TLV-TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

III. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

<table>
<thead>
<tr>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
<th>Degree of Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0 – Minimal (Insignificant)</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1 – Slight</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2 – Moderate</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3 – Serious (High)</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4 – Severe (Extreme)</td>
</tr>
<tr>
<td>*</td>
<td></td>
<td></td>
<td>* - Chronic Health Effect(s)</td>
</tr>
</tbody>
</table>

(see section 16 for acronyms)
Potential Health Effects

Target Organs: Upper respiratory system, lungs, skin and eyes.
Primary Routes of Entry: Inhalation, skin, eye contact and ingestion.

Human Effects and Symptoms of Overexposure: The occupational hazards from exposure to fiber glass are primarily those of irritations coming from direct contact with the material.

Acute Inhalation: Temporary upper respiratory irritation.
Chronic Inhalation: None known
Skin Absorption: None
Acute Eye Contact: Temporary eye irritation.
Chronic Eye Contact: None Known
Acute Ingestion: Unlikely. Contact physician if unusual reaction is noted.
Chronic Ingestion: None Known

Medical Conditions that may be Aggravated: Pre-existing conditions that may be aggravated by mechanical irritants upon inhalation or skin contact.

Carcinogenicity:
Ingredient: Fiber glass wool, Glasswool (respirable size).
IARC: Group 3, not classifiable as to carcinogenicity to humans.
NTP: Listed as 2, reasonable anticipated to be a carcinogen, sufficient evidence from studies in experimental animals.
OSHA: Not Listed

Ingredient: Fiber glass textile
IARC: Group 3, not classifiable as to carcinogenicity to humans.
NTP: Not Listed
OSHA: Not Listed

Mutagenicity: None
Teratogenicity: None
Reproductive Toxicity: None
Toxicological synergistic products: None

IV. FIRST AID MEASURES

Inhalation: Remove from exposure, seek medical attention if irritation persists.
Skin Contact: Cleanse with soap and warm water. Seek medical attention if irritation persists.
Eye Contact: Do not rub or scratch you eyes. Flush immediately with running water for at least 15 minutes. Seek medical help if burning or irritation persists.
Ingestion: Unlikely. Contact a physician if unusual reaction is noted.
Fires: Remove to fresh air. Administer oxygen and get medical help.
Information for Medical Practitioners: Skin irritation responds well to mild hydrocortisone cream.

V. FIRE-FIGHTING MEASURES

Flash Point (°F) and Method: Does not support combustion.
Flammable Limits: LEL: N/A UEL: N/A
Autoignition Temperature: N/A
Extinguishing Media: Use that which is applicable to surrounding fire.
Special Fire Fighting Procedures: Treat as residential building materials.
Unusual Fire and Explosion Hazard: These products contain a cured phenolic based binder. The binder, facings, paint, and glue in a fire situation may emit fumes and smoke primarily containing carbon dioxide, carbon monoxide and molecular fragments of hydrocarbon particulates, carbon-hydrogen-nitrogen and nitrogen-oxygen compounds. The polyvinyl fluoride facing may thermally decompose above 200°C (400°F) and release hydrogen chloride and hydrogen fluoride. Carbon monoxide, carbon dioxide, hydrogen chloride, hydrogen fluoride and sulfur dioxide may also be formed in a fire situation.
VI. ACCIDENTAL RELEASE MEASURES

Spills and Accidental or Unplanned Releases: Clean area and vacuum dust deposits. Do not use compressed air for cleanup.

VII. HANDLING AND STORAGE

Handling: Handle in accordance with good industrial hygiene and safety practices. Most products are coated or sealed on all sides and no specific handling measures are needed. In case of cutting the products, it is recommended to reseal them with the recommended paint. When cutting, it is recommended to wear gloves. In case of high dust levels or if the level of airborne glass fibers exceeds the exposure guidelines or if irritation occurs, a properly fitted NIOSH-certified respirator should be used. After handling, cleanse with soap and water. Wash work clothes separately and rinse after use.

Storage: Store in a dry place and under cover to protect product.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Work Practices and Engineering Controls: Use good local exhaust ventilation and appropriate cutting tools. Keep the work area clean from dust and fibers generated during cutting.

Personal Protective Equipment: Respirators: Use adequate ventilation to keep airborne concentrations below the exposure standard listed in Section II and/or Section V.

Skin: Wear gloves.

IX. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Fibers assembled into panels and boards. The products are faced with glass fiber mat and painted on front side or both sides. One product is wrapped in PVF film.

Physical State: Solid
Boiling Point (°F): N/A
Melting Point (°F): N/A
Specific Gravity (H2O = 1): Glass = 2.5
Odor: Faint resin odor
Evaporation rate (ethyl ether = 1): N/A
Color: Yellow
pH: N/A
Vapor Density (Air = 1): N/A
Freezing Point: N/A
Vapor Pressure (mmHg@20 C): N/A
Odor Threshold: None
% Solubility: Small

X. STABILITY AND REACTIVITY

Stability: Stable under normal dry conditions.
Corrosivity: Not corrosive
Incompatibility: Hydrofluoric acid
Reactivity: None
Explosion: Product is not sensitive to mechanical impact or static discharge.

XI. TOXICOLOGICAL INFORMATION

Following a thorough review of all of the medical-scientific data available at a meeting in October 2001, the IARC panel lowered the classification for glass wool insulation fibers from a Group 2B classification (“possibly carcinogenic to humans”) to a Group 3 classification (“not classifiable as to carcinogenicity to humans”). IARC said that there is “no evidence of increased risks of lung cancer or of mesothelioma...from occupational exposures during the manufacture of these materials, and inadequate evidence overall of any cancer risk.”
XII. ECOLOGICAL INFORMATION

More than 70% of this product is recovered household glass and recycled glass wool.

This product is not manufactured with, nor does it contain any Class I ozone depleting chemicals as defined by EPA in Title VI of the Clean Air Act Amendments of 1990 40 CFR Part 82, Protection of stratospheric ozone.

This product is not classified as a hazardous air pollutant in Title III Clean Air Act of 1990.

Binder-coated fiber glass is hydrophobic, therefore, no adverse environmental effects would be expected if this product were accidentally released in the water of soil. No harm to fish or wildlife would be caused by this product.

XIII. DISPOSAL CONSIDERATIONS

Scrap material should be disposed of in a sanitary landfill in accordance with federal, state and local regulations. Waste material is not considered hazardous by RCRA (40 CFR Part 261).

XIV. TRANSPORT INFORMATION


XV. REGULATORY INFORMATION

As these products are considered a mixture, each component is listed below identifying its status on specific regulatory lists.

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>SARA Title III Section 313</th>
<th>SARA Title III Section 302</th>
<th>California Proposition 65</th>
<th>Canada DSL</th>
<th>Canada NDSL</th>
<th>USA TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass, oxide, chemicals (wool &amp; textile)</td>
<td>—</td>
<td>—</td>
<td>✓ †</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>- 65997-17-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urea, polymer with formaldehyde and phenol (cured) – 25104-55-6</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Dolomite – 16389-88-1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Limestone – 1317-65-3</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Aluminum Trihydroxide</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>✓</td>
<td>—</td>
<td>✓</td>
</tr>
<tr>
<td>– 21645-51-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluoroethene, homopolymer</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>✓</td>
<td>—</td>
<td>✓</td>
</tr>
<tr>
<td>– 24981-14-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

† listed as glass wool fibers (airborne particulates of respirable size)

XVI. OTHER INFORMATION

ACGIH: American Conference of Governmental Industrial Hygienists
CAS No: Chemical Abstracts Service Number
CFR: Code of Federal Regulations
EPA: Environmental Protection Agency
f/cc: fibers per cubic centimeter
HMIS: Hazardous Material Identification
IARC: International Agency for Research on Cancer
LEL: Lower Explosive Limit
mg/m³: Milligrams per cubic meter
MSHA: Mine Safety and Health Administration
N/A: Not applicable
NIOSH: National Institute for Occupational Health and Safety
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration

PEL: Permissible Exposure Limit

RCRA: Resource Conservation and Recovery Act

REL: Recommended Exposure Limit

SARA: Superfund Amendments and Reauthorization Act

Title III: Emergency Planning and Community Right to Know Act
Section 302 – Extremely Hazardous Substances
Section 313 – Toxic Chemicals

TLV: Threshold Limit Value

TSCA: Toxic Substances Control Act (USA)

TWA: Time Weighted Average Safety and Health

UEL: Upper Explosive Limit

California Proposition 65: California Title 22, Division 2, Chapter 3 Safe Drinking Water and Toxic Enforcement Act of 1986

Canada DSL: Canadian Domestic Substance List

Canada NDSL: Canadian Non-domestic Substance List

Respirable Nuisance Dust: The respirable fraction of suspended airborne particulates

Respirable Fibers (ACGIH): Suspended airborne particulates with lengths greater than 5 microns and a 3:1 length-to-width ratio. Results given as f/cc.

Respirable Fibers (NIOSH): Suspended airborne particulates with diameters of 3.5 microns or less and lengths of 10 microns or more. Results given as f/cc.

Total Dust: Suspended airborne particles of “nuisance” dusts including those of non-respirable size

Total Glass Dust: Suspended airborne particles of dust composed of glass only, including those of non-respirable size