Material Safety Data Sheet

Material Name: OC Mat, 1600 Series, VL8101, VL8201

** Section 1 - Chemical Product and Company Identification **

Product Name(s): OC Mat 1600, OC Mat 1610, OC Mat 1651, OC Mat 1653, VL 8101, VL8201

Owens Corning
One Owens Corning Parkway, World Headquarters
Attn: Product Stewardship
Toledo, OH 43659, USA

Emergency Contacts:
Emergencies ONLY (after 5pm ET and weekends): 1-419-248-5330,
CHEMTREC (24 hours everyday): 1-800-424-9300,
CANUTEC (Canada - 24 hours everyday): 1-613-996-6666.

Health and Technical Contacts:
Health Issues Information (8am-5pm ET): 1-419-248-8234,
Technical Product Information (8am-5pm ET): 1-800-GET-PINK.

** Section 2 - Composition / Information on Ingredients **

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component</th>
<th>Percent by Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>65997-17-3</td>
<td>Fiber Glass Continuous (non-respirable)</td>
<td>80-90</td>
</tr>
<tr>
<td>Non Hazardous</td>
<td>Acrylate Copolymer</td>
<td>10-20</td>
</tr>
</tbody>
</table>

Component Related Regulatory Information
This product may be regulated, have exposure limits or other information identified as the following: Glass filaments, Fibrous glass, and Nuisance particulates.

Component Information/Information on Non-Hazardous Components
No additional information available.

** Section 3 - Hazards Identification **

Appearance and Odor: White to yellow fiberglass mat with a faint chemical odor.

Emergency Overview
This product may emit dense smoke when burned without sufficient oxygen.

Potential Health Effects

Inhalation:
Fiberglass continuous filament is a mechanical irritant. Breathing dusts and fibers may cause short-term irritation of the mouth, nose and throat.

Skin Contact:
Dust and fibers from this product may cause itching and short term irritation.
Material Safety Data Sheet

Material Name: OC Mats, 1600 Series, VL8101, VL8201
MSDS No.: 15-MSD-18842-01-D

Eye Contact:
Dusts and fibers from this product may cause temporary mechanical irritation to the eyes.

Ingestion:
Ingestion may cause short-term mechanical irritation of the stomach and intestines.

Medical Conditions Aggravated by Exposure:
Respiratory or skin conditions that are aggravated by mechanical irritants may be at an increased risk for worsening from exposure to this product.

*** Section 4 - First Aid Measures ***

Inhalation:
If inhaled, immediately remove the affected person to fresh air. If symptoms persist, get medical attention.

Skin Contact:
For skin contact, wash immediately with soap and water. 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.

Never use compressed air to remove fibers from the skin.

Eye Contact:
Immediately flush eyes with plenty of 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 blockage does not occur.

*** Section 5 - Fire Fighting Measures ***

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>None</td>
</tr>
<tr>
<td>Upper Flammability Limit</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability Classification</td>
<td>Non-flammable</td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Auto Ignition Temp.</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Extinguishing Media</td>
<td>Use any extinguishing media appropriate for the surrounding fires.</td>
</tr>
<tr>
<td>Unusual Fire &amp; Explosion Hazards:</td>
<td>This product may emit dense smoke when burned without sufficient oxygen.</td>
</tr>
<tr>
<td>Fire-Fighting Instructions</td>
<td>Use self-contained breathing apparatus (SCBA) and full bunker turnout gear in a sustained fire.</td>
</tr>
<tr>
<td>Hazardous Combustion Products</td>
<td>Primary combustion products are nitrogen oxide, carbon monoxide, carbon dioxide, ammonia, formaldehyde, and water. Other undetermined compounds could be released in small quantities.</td>
</tr>
</tbody>
</table>
Material Safety Data Sheet

Material Name: OC Mats, 1600 Series, VL8101, VL8201

Section 6 - Accidental Release Measures

Containment Procedures:
This material will settle out of the air. If concentrated on land, it can then be scooped up for disposal as a non-hazardous waste. This material will sink and disperse along the bottom of waterways and ponds. It can not 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.

Response Procedures:
Isolate area. Keep unnecessary personnel away.

Special Procedures:
None.

Section 7 - Handling and Storage

Handling Procedures:
Avoid inhaling dusts or vapors produced during cutting. Avoid eye and excessive skin contact. Use only with adequate ventilation. As with all chemicals, good industrial hygiene practices should be followed when handling this material. Special care must be taken to avoid buildup of dusts.

Storage Temperature:
Store below 250°F (121°C)

Storage Procedures:
Store in a dry place.

Section 8 - Exposure Controls / Personal Protection

Exposure Guidelines:
A: General Product Information
As manufactured, continuous filament glass fibers are not respirable. Continuous filament glass products that are chopped, crushed or severely processed during manufacturing or use may contain a very small amount of respirable particulate, some of which may be glass shards.

B: Component Exposure Limits
ACGIH and OSHA exposure limit lists have been checked for those components with CAS registry numbers.

Fiber Glass Continuous (non-respirable) (65997-17-3)
ACGIH: 1 t/cc TWA (for respirable fibers longer than 5 um with a diameter less than 3 um); 5 mg/m3 TWA (inhalable particulate); (Listed under "Synthetic vitreous fibers") (related to Continuous filament glass fibers)
OSHA: total dust: 15 mg/m3 TWA; respirable fraction: 5 mg/m3 TWA (related to Particulates not otherwise regulated)

Ventilation:
General dilution ventilation and/or local exhaust ventilation should be provided as necessary to maintain exposures below occupational exposure limits.
**PERSONAL PROTECTIVE EQUIPMENT**

Respiratory Protection:
A properly fitted NIOSH approved disposable N 95 series dust respirator such as the 3M model 8210 (formerly 8710) or model 8271 (formerly 9900) in high humidity environments or equivalent should be used under the following conditions: 1) any dust environment; 2) when mechanically altering product (mechanical transfer, crushing, grinding, milling or other similar dust generating process. Use respiratory protection in accordance with your company's respiratory protection program, local regulations and OSHA regulations under 29 CFR 1910.134.

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

Eyes/Face Protective Equipment:
Wear safety glasses or goggles.

Work Practices:
Handle using good industrial hygiene and safety practices. Avoid unnecessary contact with dusts and fibers by using good local exhaust ventilation. Remove material from the skin and eyes after contact. Remove material from clothing using vacuum equipment (never use compressed air and always wash work clothes separately from other clothing. Wipe out the washer or sink to prevent loose glass fibers from getting on other clothing). Keep the work area clean of dusts and fibers made during fabrication by using vacuum equipment to clean up dusts and fibers (avoid dry sweeping or using compressed air as these techniques re-suspend dusts and fibers into the air.) Have access to safety showers and eye wash stations.

** *** Section 9 - Physical & Chemical Properties *** **

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White to yellow fiberglass mat</td>
</tr>
<tr>
<td>Physical State</td>
<td>Glass mat</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg @ 20°C)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Specific Gravity (Water=1)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation Rate (n-Butyl Acetate=1)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

Physical Properties: Additional Information
No additional information available.

** *** Section 10 - Chemical Stability & Reactivity Information *** **

Stability:
This is a stable material.

Conditions to Avoid:
None expected.

Incompatible Materials:
None expected.
Material Safety Data Sheet

Material Name: DC Mats, 1600 Series, VL8101, VL8201

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

Hazardous Polymerization:
Will not occur.

Section 11 - Toxicological Information

Acute and Chronic Toxicity:
A: General Product Information
Dusts and fibers 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. Higher exposures may cause difficulty breathing, congestion, and chest tightness.

B: Component Analysis - LD50/LC50
No LD50/LC50's are available for this product's components.

Carcinogenicity:
A: General Product Information
Fiber Glass Continuous Filament: The International Agency for Research on Cancer (IARC) in June, 1987, categorized fiber glass continuous filament as not classifiable with respect to human carcinogenicity (Group 3). The evidence from human as well as animal studies was evaluated by IARC as insufficient to classify fiber glass continuous filament as a possible, probable, or confirmed cancer causing material. The American Conference of Governmental Industrial Hygienists (ACGIH) A4 classification, not classifiable as a human carcinogen, for respirable continuous filament glass fibers is based on inadequate data in terms of its carcinogenicity in humans and/or animals. For respirable continuous filament glass fibers, a TLV-TWA of 1 fiber/cc was adopted to protect workers against mechanical irritation. The TLV-TWA of 5 mg/m3 was adopted for nonrespirable glass filament fiber, measured as inhalable dust, to prevent mechanical irritation of the upper respiratory tract.

B: Component Carcinogenicity
ACGIH, IARC, OSHA, and NTP carcinogen lists have been checked for those components with CAS registry numbers.
Fiber Glass Continuous (non-respirable) (65997-17-3)
ACGIH: A4 - Not Classifiable as a Human Carcinogen (related to Continuous filament glass fibers)
IARC: Monograph 43, 1988 (related to Glass filaments) (Group 3 (not classifiable))

Section 12 - Ecological Information

Ecotoxicity:
This material is not expected to cause harm to animals, plants or fish.

Environmental Fate:
No data available for this product.

Section 13 - Disposal Considerations

US EPA Waste Number & Descriptions:
A: General Product Information
No components are identified as hazardous wastes.
Material Safety Data Sheet

Material Name: OC Mats, 1600 Series, VL8101, VL8201

MSDS No.: 15-MSD- 18842-01-D

B: Component Waste Numbers
No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions:
Consult appropriate authorities before disposing of this material.

*** 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
Additional Info.: 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 ***

US Federal Regulations:
A: General Product Information
No additional information available.

B: Component Analysis
None of this product's components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

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
None of this product's components are listed on the Clean Air Act-1990 Hazardous Air Pollutants List.

State Regulations:
A: General Product Information
No additional information available.
Material Safety Data Sheet

Material Name: OC Mats, 1600 Series, VL8101, VL8201  
MSDS No.: 15-MSD-18842-01-D

B: Component Analysis - State
The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<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>Fiber Glass Continuous (non-respirable)</td>
<td>65997-17-3</td>
<td>Yes¹</td>
<td>No</td>
<td>Yes²</td>
<td>Yes</td>
<td>No</td>
<td>Yes²</td>
</tr>
</tbody>
</table>

Other Regulations:

A: General Product Information
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>Fiber Glass Continuous (non-respirable)</td>
<td>65997-17-3</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:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Item 768 (884) (related to Fibrous glass)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber Glass Continuous (non-respirable)</td>
<td>65997-17-3</td>
<td>1% item 768 (884) (related to Fibrous glass)</td>
</tr>
</tbody>
</table>

WHMIS Status: Not controlled
WHMIS Classification: None

*** Section 16 - Other Information ***

<table>
<thead>
<tr>
<th>HMIS and NFPA Hazard Ratings:</th>
<th>Category</th>
<th>HMIS</th>
<th>NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Flammability</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reactivity</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

NFPA Unusual Hazards: None

HMIS Personal Protection: To be supplied by user depending upon use.

Reasonable care has been taken in the preparation of this information, but 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.

Key/Legend:
EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; NJTSR = New Jersey Trade Secret Registry.

Revision Summary:
This is a revised MSDS, which replaces 15-MSD-18842-01-C with updated product names. Read this information carefully.

Get OC MSDS electronically via Internet: http://www.owenscorning.com or by calling 1-419-248-8234.

This is the end of MSDS # 15-MSD-18842-01-D