Material Safety Data Sheet

Material Name: Low Density Fiber Glass Insulation/Insulation Board – Unfaced Products

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

Product Name(s): Acoustical Backing Board, Advanced ThermaCube Plus®, Blended Blowing Wool, Cathedral Batt Insulation, Cavity Wall, Cold Storage Wall, Curtain Wall 225, Duct Liner Board, Flexible Marine, Flexible Type 75 AF-FDM, HV-24, HV-26, H₂V-1000, H₂V-2000, Insulation Batt, Manufactured Housing Insulation, Masonry Wall Insulation, Metal Building (all types), Metal Framing Batt, Metal Framing Insulation, Multi-purpose Insulation, Noise Stop Board, Pink® Insulation, Pink Pak, Quiet Zone Acoustic Batt, RA Series, Shaft Wall, Sill Sealer, Sonobatts, Sound Attenuation Batt, Standard Blend, Super Pink R Blowing Wool, ThermaGlas®, Marine Board, Unfaced Duct Wrap, Warm-N-Dri, YELLOW JACKET™ Fiber Glass Insulation, and YELLOW JACKET™ Loose Fill.

Manufacturer:
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): 1-800-GET-PINK,
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 Wool (Fibrous Glass)</td>
<td>85-96</td>
</tr>
<tr>
<td>25104-55-6</td>
<td>Urea, polymer with formaldehyde and phenol</td>
<td>4-15</td>
</tr>
</tbody>
</table>

Component Related Regulatory Information
This product may be regulated, have exposure limits or other information identified as the following: Fiber Glass wool, fibrous glass, insulation glasswool, glasswool (respirable size) and nuisance particulates.

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

*** Section 3 - Hazard Identification ***

Appearance and Odor: Pink, yellow, or tan fibrous material with faint resin odor.

Emergency Overview
Exposure to dust may be irritating to eyes, nose, and throat.

Potential Acute Health Effects

Inhalation:
Dusts and fibers from this product may cause mechanical irritation of the nose, throat, and respiratory tract.
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MSDS No.: 15-MSD-13614-01-R

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

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

Ingestion:
Ingestion of this product is unlikely. However, ingestion of product may produce gastrointestinal irritation and disturbances.

Medical Conditions Aggravated by Exposure:
Chronic respiratory or skin conditions may temporarily worsen from exposure to this product.

Chronic Conditions:
See Section 11 for additional information.

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

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

Skin Contact:
For skin contact, wash with mild soap and running 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. If fibers are seen penetrating from the skin, the fibers can be removed by applying and removing adhesive tape so that the fibers adhere to the tape and are pulled out of 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 obstruction does not occur. Do not induce vomiting unless directed to do so by medical personnel.

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

Flash Point: None
Flash Point Method: Not applicable
Upper Flammability Limit: Not applicable
Lower Flammability Limit: Not applicable
Flammability Classification: Non-flammable

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

Unusual Fire & Explosion Hazards:
No unusual fire and explosion hazards are expected from this product.

Fire-Fighting Instructions:
In a sustained fire use self-contained breathing apparatus (SCBA) and full bunker turnout gear.
Hazardous Combustion Products:
Primary combustion products are carbon monoxide, 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 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 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.

Response Procedures:
Isolate area. Keep unnecessary personnel away.

Special Procedures:
None.

*** Section 7 - Handling and Storage ***

Handling Procedures:
Keep product in its packaging until use to minimize potential dust generation. Keep work areas clean. Avoid unnecessary handling of scrap material. Wear PPE as described in Section 8. Follow good industrial hygiene practices when handling this material.

Storage Procedures:
Material should be kept dry and undercover.

*** Section 8 - Exposure Controls / Personal Protection ***

Exposure Guidelines:
A: General Product Information
Follow all applicable exposure limits.

B: Component Exposure Limits
ACGIH and OSHA exposure limit lists have been checked for those components with CAS registry numbers.
Fiber Glass Wool (Fibrous Glass) (65997-17-3)
ACGIH: 1 f/cc TLV-TWA for respirable fibers longer than 5 um with a diameter less than 3 um; (Listed under “Synthetic vitreous fibers”) (listed as glass wool fibers) (related to particulates not otherwise classified (PNOC))
OSHA: 1 fiber/cc (respirable) TWA (a) (See Note Below)

Note: (a) A voluntary PEL was established by the North American Insulation Manufactures Association (NAIMA) and OSHA per the Health and Safety Partnership Program (HSPP) agreement for Synthetic Vitreous Fibers (SVF).
Ventilation:
General dilution ventilation and/or local exhaust ventilation should be provided as necessary to maintain exposures below regulatory limits. Dust collection systems should be used in operations involving the use of power tools.

PERSONAL PROTECTIVE EQUIPMENT
Respiratory Protection:
Use a properly fitted NIOSH or MSHA approved disposable dust respirator such as the 3M Model 8210 (3M Model 8271 in high humidity environments) or equivalent when you: 1) install or remove loose fill, 2) install or remove any of these products in poorly ventilated spaces such as attics or crawlspaces. As an extra precaution you may choose, but are not required, to wear a disposable dust respirator at all times.

Skin Protection:
Normal work clothing (long sleeved shirt, long pants, and gloves) is recommended. 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.

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Fibrous</td>
</tr>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Odor</td>
<td>Organic</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</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>Boiling Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Specific Gravity (Water=1)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility (H2O)</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Evaporation Rate (n-Butyl Acetate=1)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing Point</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 ***

Stability:
This is a stable material.

Conditions to Avoid:
None expected.

Incompatible Materials:
None expected.

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

Hazardous Polymerization:
Will not occur.
**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. Higher exposures may cause difficulty breathing, congestion, and chest tightness.

**Component Analysis - LD50/LC50**

- **Urea, polymer with formaldehyde and phenol (25104-55-6)**
  - Oral LD50 Rat: 7 gm/kg
  - Oral LD50 Mouse: 7 gm/kg

**Carcinogenicity:**

**Fiber Glass Wool:** In October 2001, the International Agency for Research on Cancer (IARC) classified fiber glass wool as Group 3, "not classifiable as to its carcinogenicity to humans.” The 2001 decision was based on human studies and animal research that have not shown an association between inhalation exposure to dust from fiber glass wool and the development of respiratory disease. This classification replaces the IARC finding in 1987 of a Group B designation "possibly carcinogenic to humans."

In May 1997, the American Conference of Governmental Industrial Hygienists (ACGIH) adopted an A3 carcinogen classification for glass wool fibers. The ACGIH A3 classification considers glass wool to be carcinogenic in experimental animals at relatively high doses, by routes of administration, at sites, or by mechanisms that it does not consider relevant to worker exposure. It also reviewed the available epidemiological studies and concluded that they do not confirm an increased risk of cancer in exposed humans. Overall, the ACGIH found that the available medical/scientific evidence suggests that glass wool is not likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.

In 1994, the National Toxicology Program (NTP) classified glass wool (respirable size) as “reasonably anticipated to be a human carcinogen.” This classification was primarily based upon the 1987 IARC classification. NTP is currently considering reclassifying this material.

**Component Analysis**

- **Fiber Glass Wool (Fibrous Glass) (65997-17-3)**
  - IARC: Group 3 “not classifiable as to its carcinogenicity to humans” (related to Glasswool)
  - ACGIH: A3 - animal carcinogen (related to Glass wool fibers)
  - NTP: Reasonably anticipated to be a human carcinogen (related to glasswool) (possible select carcinogen)

**Section 12 - Ecological Information**

No data available for this product.

**Section 13 - Disposal Considerations**

**US EPA Waste Number & Descriptions:**

**A: General Product Information**

This product, 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
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
This material contains one or more of the following chemicals that are identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

None

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

SARA 311/312
Acute Health Hazard: Yes
Chronic Health Hazard: Yes
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>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 Wool (Fibrous Glass) (¹ related to Mineral wool fiber)</td>
<td>65997-17-3</td>
<td>Yes¹</td>
<td>No</td>
<td>Yes¹</td>
<td>Yes¹</td>
<td>No</td>
<td>Yes¹</td>
</tr>
</tbody>
</table>

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):
WARNING! This product contains a chemical known to the state of California to cause cancer.

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 Wool (Fibrous Glass)</td>
<td>65997-17-3</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Urea, polymer with formaldehyde and phenol</td>
<td>25104-55-6</td>
<td>Yes</td>
<td>Yes</td>
<td>No</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>WHMIS Status</th>
<th>WHMIS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber Glass Wool (Fibrous Glass)</td>
<td>65997-17-3</td>
<td>Controlled</td>
<td>D2A- Carcinogenicity</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D2B- Irritation</td>
</tr>
</tbody>
</table>

WHMIS Status: Controlled
WHMIS Classification: D2A- Carcinogenicity
D2B- Irritation

*** 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>Acute Health</td>
<td>1*</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Flammability</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
<td>0</td>
<td></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; NFPA = National Fire Protection Association; HMIS = Hazardous Material Identification System; CERCLA = Comprehensive Environmental Response, Compensation and Liability Act; SARA = Superfund Amendments and Reauthorization Act; DSL = Canadian Domestic Substance List; EINECS = European Inventory of New and Existing Chemical Substances; WHMIS = Workplace Hazardous Materials Information System; CAA = Clean Air Act

Revision Summary:
This is a revised MSDS, which replaces 15-MSD-13614-01-Q with updated product names. Read this information carefully.

Get OC MSDS electronically via Internet: http://www.owenscorning.com or by calling 1-800-GET-PINK.

This is the end of MSDS # 13614-01-R