MATERIAL SAFETY DATA SHEET

1. PRODUCT and COMPANY IDENTIFICATION

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

Common name: Acoustical Backing Board, Advanced ThermaCube Plus®, Blended Blowing Wool, Cathedral Batt Insulation, Cavity Wall, Cold Storage Wall, Curtain Wall 225, 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 Batts, Metal Framing Insulation, Multi-purpose Insulation, Noise Stop Board, Pink® Insulation, Pink Pak, QuietZone® Acoustic Batt, RA Series, Shaft Wall, Sill Sealer, Sonobatts®, Sound Attenuation Batts, 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

MSDS No.: 13614-NAM-EN

Recommended Use: Insulation

Contact manufacturer: Owens Corning Insulating Systems, LLC
One Owens Corning Parkway
Toledo, OH  43659

Emergency telephone number:
Emergencies Only (after 5 pm AND weekends)  1-419-248-5330
CHEMTREC (24 hours everyday)  1-800-424-9300
CAUNTEC (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 or 1-800-438-7465

2. HAZARD IDENTIFICATION

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

Appearance: Pink, Yellow, Tan  Physical State: Solid, Fibrous  Odor: Faint Resin
### Potential Health Effects

**Principle Routes of Exposure**
- Eye
- Skin Contact
- Inhalation

**Acute Effects**
- **Eyes** May cause slight irritation
- **Skin** May cause slight skin irritation
- **Inhalation** May cause irritation of respiratory tract
- **Ingestion** Ingestion of material is unlikely

**Chronic Effects** There is no known chronic health effect connected with long-term use or contact with these products

**Aggravated Medical Conditions**
Chronic respiratory or skin conditions may temporarily worsen from exposure to this product

**Carcinogenic Status**
This product contains a component which is listed by IARC, OSHA or NTP. See Section 11

**OSHA Regulatory Status**
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

### Potential Environmental Effects
There is no known ecological information for this product

### 3. 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>Glass Fiber, Wool</td>
<td>85-100</td>
</tr>
<tr>
<td>25104-55-6</td>
<td>Urea, polymer with formaldehyde and phenol</td>
<td>0-15</td>
</tr>
</tbody>
</table>

**Non-Hazardous Statement**
The remaining components of this product are non-hazardous or are in small enough quantities as to not meet regulatory thresholds for disclosure. These components contain no substances or impurities which would influence the classification of this product.

### 4. FIRST AID MEASURES

**Eye contact**
- Rinse immediately with plenty of water, also under the eyelids, for at least 15 Minutes
- Do not rub or scratch eyes
- If eye irritation persists, consult a specialist

**Skin contact**
- Wash off immediately with soap and cold water.
- DO NOT use warm water because this will open up the pores of the skin, which will cause further penetration of the fibers.
- DO NOT rub or scratch affected areas.
- Use a wash cloth to help remove fibers or apply and remove an adhesive tape so that the fibers adhere to the tape and are pulled out of the skin.
- Remove contaminated clothing.
- If skin irritation persists, call a physician
- **Never use compressed air to remove fibers from skin**
Ingestion
- Accidental ingestion of this material is unlikely
- If this does occur, watch person for several days to make sure intestinal blockage does not occur
- Rinse mouth with water to remove fibers from the throat
- If symptoms persist, call a physician

Inhalation
- Move to fresh air
- If symptoms persist, call a physician

5. FIRE-FIGHTING MEASURES

Flammability/Combustibility Properties
- Non-flammable

Suitable extinguishing media
- dry chemical
- foam
- carbon dioxide (CO2)
- water fog

Unsuitable Extinguishing Media
- None

Hazardous Combustion Products
- Carbon Monoxide
- Carbon Dioxide (CO2)
- Ammonia
- Other undetermined compounds could be released in small quantities

Explosion Data
- Sensitivity to Mechanical Impact: Not available
- Sensitivity to Static Discharge: Not available

Special Hazards Arising from the Chemical
- No unusual fire and explosions hazards are expected from this product

Protective Equipment and Precautions for Firefighters
- Wear self-contained breathing apparatus (SCBA) and full fire fighting protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
- Avoid contact with the skin and the eyes.

Methods for Containment
- Material will settle out of air
- Prevent from spreading by covering or other means

Methods for Clean-up
- Use an industrial vacuum cleaner with a high efficiency filter to clean up dust and fiber contamination
- Avoid dry sweeping
- After cleaning, flush away traces with water
- Pick up and transfer to properly labeled containers

7. HANDLING AND STORAGE

Handling
- Avoid dust formation
- Do not breathe dust
- Wear personal protective equipment

Storage
- Keep product in its packaging until use to minimize potential dust generation.
- Material should be kept dry and covered
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th></th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>Ontario TWAEV</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass Fiber – Wool</td>
<td>1 f/cc (respirable)</td>
<td>1 f/cc (respirable)</td>
<td>STEL – 0.6 mg/m³</td>
<td>TWA – 0.15 mg/m³</td>
</tr>
<tr>
<td>65997-17-3</td>
<td>10 mg/m³ (inhalable synthetic vitreous fibers)</td>
<td></td>
<td>TWA – 0.05 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 mg/m³ (respirable fraction - PNOC)</td>
<td></td>
<td>TWA – 1 f/cc</td>
<td></td>
</tr>
</tbody>
</table>

### Engineering Controls
- Provide local exhaust and/or general ventilation to maintain exposure below regulatory and recommended limits.
- Dust collection system must be used in transferring operations, cutting or machining or other dust generating process.
- Vacuum or wet clean-up methods should be used

### Personal protective equipment

#### Respiratory protection
- When workers are facing concentrations above the exposure limit they must use appropriate certified respirators such as 3M model 8210 (3M model 8271 in high humidity environments)

#### Eye/face Protection
- Safety glasses with side-shields

#### Skin Protection
- Protective gloves
- Long sleeved shirt and long pants

#### General Hygiene Considerations
- Wash hands before breaks and immediately after handling the product
- Avoid contact with skin, eyes and clothing
- Avoid getting dust into boots and gloves through wrist bands and pant tucks
- Remove and wash contaminated clothing before re-use

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Pink, yellow, tan</td>
</tr>
<tr>
<td>Odor</td>
<td>Faint resin (organic)</td>
</tr>
<tr>
<td>Physical State</td>
<td>Solid, fibrous</td>
</tr>
<tr>
<td>pH</td>
<td>Does not apply</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>Does not apply</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Does not apply</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>lower / upper /</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Does not apply</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>Does not apply</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Does not apply</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Does not apply</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Insoluble</td>
</tr>
<tr>
<td>VOC content</td>
<td>Not available</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Stability</td>
<td>Stable</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>None expected</td>
</tr>
<tr>
<td>Incompatible Materials</td>
<td>None expected</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>See Section 5 for hazardous decomposition products during a fire</td>
</tr>
</tbody>
</table>
11. TOXICOLOGICAL INFORMATION

Acute toxicity
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

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urea, polymer with formaldehyde</td>
<td>7 g/kg Rat</td>
</tr>
<tr>
<td>and phenol</td>
<td></td>
</tr>
</tbody>
</table>

Chronic toxicity
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

<table>
<thead>
<tr>
<th>Fiber Glass, Wool 65997-17-3</th>
<th>ACGIH</th>
<th>IARC</th>
<th>OSHA</th>
<th>NTP</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A3</td>
<td>Group 3</td>
<td>X</td>
<td>Reasonably Anticipated</td>
<td>A3 animal carcinogen</td>
</tr>
<tr>
<td></td>
<td>animal carcinogen</td>
<td>not classifiable</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Allergy
No information available
Neurological Effects
No information available
Mutagenic Effects
No information available
Reproductive Effects
No information available
Developmental Effects
No information available
Target Organ Effects
No information available

12. ECOLOGICAL INFORMATION

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

Chemical Fate

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistance/Degradability</td>
<td>Not available</td>
</tr>
<tr>
<td>Bioaccumulation/Accumulation</td>
<td>Not available</td>
</tr>
<tr>
<td>Mobility in Environmental Media</td>
<td>Not available</td>
</tr>
</tbody>
</table>
13. DISPOSAL CONSIDERATIONS

Waste Disposal Method
Dispose of in accordance with Local, State, Federal and Provincial regulations.

Contaminated packaging
Empty containers should be taken for local recycling, recovery or waste disposal.

US EPA Waste Number
No EPA Waste Numbers are applicable for this product’s components.

RCRA
This material is not expected to be a characteristic hazardous waste under RCRA

14. TRANSPORT INFORMATION

DOT
not regulated

TDG
not regulated

IMDG/IMO
not regulated

RID
not regulated

ADR
not regulated

ICAO
not regulated

IATA
not regulated

MEX
not regulated

15. REGULATORY INFORMATION

International Inventories
All components of this product are either listed on the following inventories or are exempt.

<table>
<thead>
<tr>
<th>Component</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>ENCS</th>
<th>China</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass Fiber – Wool 65997-17-3</td>
<td>XU</td>
<td>Present</td>
<td>-</td>
<td>266-046-0</td>
<td>-</td>
<td>-</td>
<td>Present</td>
<td>KE-17630</td>
<td>GEN-0994</td>
<td>Present</td>
</tr>
<tr>
<td>Urea, polymer with formaldehyde and phenol 25104-55-6</td>
<td>XU</td>
<td>Present</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>7-907</td>
<td>Present</td>
<td>KE-35185</td>
<td>-</td>
<td>Present</td>
</tr>
</tbody>
</table>

USA
Federal Regulations

SARA 313 Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)
This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazardous Categorization

Acute Health Hazards
yes

Chronic Health Hazards
yes

Risk of Ignition
no

Sudden Release of Pressure
no

Reactive Hazard
no

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product does not contain any HAPs

Revision Date 17-July-2007
**State Regulations**

**California Proposition 65**

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.

**State Right-To-Know**

<table>
<thead>
<tr>
<th>Component</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
<th>IL</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass Fiber, Wool</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**Canada**

**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>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber Glass, Wool</td>
<td>65997-17-3</td>
<td>1% item 768 (884) (related to Fibrous Glass)</td>
</tr>
</tbody>
</table>

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

**WHMIS Status** Controlled

**WHMIS Classification** D2A-Carcinogenicity, D2B-Irritation

**16. OTHER INFORMATION**

**Preparation Date:** 16-December-1997

**Revision Date:** 17-July-2007

**Revision Summary** New format and company name

**Disclaimer**

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

**End of Safety Data Sheet**