SECTION 1 : IDENTIFICATION

Product Name: 700 Series Board, Serie 700 de Fiberglas
SDS Manufacturer Number: 17020-SAM-EN
Synonyms: 700 Series Board, Serie 700 de Fiberglas, AF 220, AF 500 Series, AT-400 Series, Black Acoustic Board, Equipment & Appliance, Fabrication Board, Fiberglass Basic for Molding, FLEXWRAP®, Insul-Quick®, Jet-Cel Acoustical, Marine Hullboard, Muffler Packing, NuKon® insulation blanks, Pipe & Tank Insulation, Railroad, SCR Board, SelectSound® Sanded Acoustical Board, SR & HT Range, TIW Thermal Insulation Wool, Transportation, Type 1000
Product Use/Restriction: Insulation
Manufacturer Name: Owens Corning Insulating Systems, LLC
Address: One Owens Comming Parkway
Toledo, OH 43659
Customer Service Phone Number: 1-800-GET-PINK or 1-800-438-7465
Health Issues Information: 1-800-GET-PINK or 1-800-438-7465
Technical Product Information: 1-800-GET-PINK or 1-800-438-7465
Emergency Phone Number: 1-419-248-5330 (after 5pm ET and weekends)
CHEMTREC: 800-424-9300 (24 hours everyday).
Website: www.owenscorning.com
SDS Creation Date: December 16, 1997
SDS Revision Date: January 14, 2013

SECTION 2 : HAZARD(S) IDENTIFICATION

Applies to Product

Emergency Overview: Exposure to dust may be irritating to eyes, nose, and throat.
Route of Exposure: Eye contact

Potential Health Effects:
Eye: May cause slight irritation.
Skin: May cause slight skin irritation.
Inhalation: May cause irritation of respiratory tract.
Ingestion: Ingestion of this product is unlikely.

Chronic Health Effects: There is no known chronic health effect connected with long-term use or contact with this product.

Potential Environmental Effects: There is no known ecological information for this material.

Aggravation of Pre-Existing Conditions: Chronic respiratory or skin conditions may temporarily worsen from exposure to this product.

Appearance and Odor: Pink, yellow, or tan fibrous material with faint resin odor. Some products have a vinyl, brown paper, foil or polypropylene facing.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>Ingredient Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urea, polymer with formaldehyde and phenol</td>
<td>25104-55-6</td>
<td>5 - 20 by weight</td>
</tr>
<tr>
<td>Cured Binder</td>
<td>N/A</td>
<td>4 - 15 by weight</td>
</tr>
<tr>
<td>Fiber Glass (Wool)</td>
<td>65997-17-3</td>
<td>85 - 96 by weight</td>
</tr>
</tbody>
</table>
Non-Hazardous Statement: The remaining components of this product are non-hazardous or are in a small enough quantity as to not meet regulatory thresholds for disclosure. These components contain no substances or impurities which would influence the classification of this product.

SECTION 4 : FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. 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. Use a wash cloth to help remove fibers. DO NOT rub or scratch affected areas. Remove contaminated clothing. 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.

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

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 and drink water to remove fibers from the throat. If symptoms persist, call a physician.

Note to Physicians: Treat symptomatically.

SECTION 5 : FIRE FIGHTING MEASURES

Flammable Properties: Non Flammable.
Flash Point: None.
Flash Point Method: Not applicable.
Lower Flammable/Explosive Limit: Not applicable.
Upper Flammable/Explosive Limit: Not applicable.
Extinguishing Media: dry chemical foam. carbon dioxide (CO2). water fog
Protective Equipment: Wear self-contained breathing apparatus (SCBA) and full fire fighting protective gear.
Unusual Fire Hazards: Hydrogen chloride to be released from the PVC barrier and vinyl facings during a fire.
Universal Fire And Explosion Hazards: Not available.

NFPA Ratings:
NFPA Health: 2
NFPA Flammability: 1
NFPA Reactivity: 0
NFPA Flammability: 2 (facing, packaging).

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personnel Precautions: Avoid contact with skin and eyes.
Environmental Precautions: Prevent further leakage or spillage if safe to do so.
Methods for containment: This material will settle out of the air. Prevent from spreading by covering, diking or other means.
Methods for cleanup: Use an industrial vacuum cleaner with a high efficiency filter to clean up dust and fiber contamination. Avoid dry sweeping. Pick up and transfer to properly labeled containers.
Other Precautions: Does not apply.

SECTION 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.
Hygiene Practices: Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Engineering Controls: Provide local exhaust and/or general ventilation to maintain exposure below regulatory and recommended limits. Dust collection systems must be used in transferring operations, cutting or machining or other dust generating processes, such as using power tools. Vacuum or wet clean-up methods should be used.

Eye/Face Protection: Safety glasses with side-shields.

Skin Protection Description: Protective gloves. Long sleeved shirt and long pants.

Respiratory Protection: When workers are facing airborne particulate/dust concentrations above the exposure limit they must use appropriate certified respirators. A properly fitted NIOSH approved disposable N 95 type dust respirator or better is recommended.

Other Protective: When the temperature of the surface being insulated exceeds 250°F (121°C), including initial startup, the binder in these products may undergo various degrees of decomposition depending on the temperature in the application. The need for respiratory protection will vary according to the airborne concentration of the decomposition products released and accumulated in the area. Wear the appropriate respiratory protection according to the conditions and exposure levels in the area.

EXPOSURE GUIDELINES

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Guideline OSHA</th>
<th>Guideline NIOSH</th>
<th>Guideline ACGIH</th>
<th>Ontario Canada</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde</td>
<td>REL-TWA: 0.016 ppm</td>
<td>REL-Ceiling/Peak: 0.1 ppm</td>
<td>TLV-Ceiling/Peak: 0.3 ppm</td>
<td>TWAEV-CEV: 0.3 ppm</td>
<td>LMPE-Ceiling/Peak: 2 ppm</td>
</tr>
<tr>
<td>Fiber Glass (Wool)</td>
<td>PEL-TWA: 1 f/cc (Respirable.)</td>
<td>TLV-TWA: 1 f/cc (Respirable.)</td>
<td>TWAEV-TWA: 0.05 mg/m3 or 1 f/cc TWA: 0.15 mg/m3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

Physical State: Solid.
Physical State Appearance: Fibrous.
Odor: organic.
Boiling Point: No Data
Melting Point: No Data
Specific Gravity: No Data
Solubility: Insoluble in water.
Vapor Density: No Data
Vapor Pressure: No Data
Evaporation Rate: No Data
pH: No Data
Viscosity: Not applicable.
Flash Point: None.
Flash Point Method: Not applicable.

SECTION 10 : STABILITY and REACTIVITY

Chemical Stability: Stable under normal conditions.
Hazardous Polymerization: Hazardous polymerization does not occur.
Conditions to Avoid: None expected
Incompatible Materials: No materials to be especially mentioned.
Special Decomposition Products: See Section 5 of MSDS for hazardous decomposition products during a fire.

SECTION 11 : TOXICOLOGICAL INFORMATION

Applies to Product: 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. High exposures may cause difficulty breathing, congestion, and chest tightness.

Carcinogens: ACGIH IARC Canada MEXICO
### Formaldehyde

| Sensitization: | No information available. |
| Mutagenicity: | No information available. |
| Reproductive Toxicity: | No information available. |
| Neurological Effects: | No information available. |
| Carcinogenicity: | Group 1 - Carcinogenic to humans |

### Cured Binder

| Sensitization: | Group 3 - Not classifiable as to its carcinogenicity to humans |
| Mutagenicity: | No Data |
| Reproductive Toxicity: | No Data |
| Neurological Effects: | No Data |

### Fiber Glass (Wool)

| Sensitization: | A3 Animal Carcinogen |
| Mutagenicity: | No Data |
| Reproductive Toxicity: | No Data |
| Neurological Effects: | No Data |

### Mobility in Environmental Media:

| Environmental Stability: | Not available. |
| Environmental Fate: | Not available. |
| Bioaccumulation: | Not available. |
| Biodegradation: | Not available. |

### Chronic Effects:

In June 2011, The National Toxicology Program (NTP) released issued by IARC, the Working Group concluded that there is sufficient evidence in humans that formaldehyde causes nasopharyngeal cancer, a rare tumor. The Working Group also concluded that there is "strong but not sufficient evidence for a causal association between leukemia and occupational exposure to formaldehyde". These findings where based on studies of workers in industries with long term exposures at levels greatly in excess of those typically associated with fiber glass insulation.

Overall, the Working Group concluded that formaldehyde is carcinogenic to humans (Group 1), on the basis of sufficient evidence in humans and sufficient evidence in experimental animals-a higher classification than previous IARC evaluations.

### ECOCLOGICAL INFORMATION

| A3 Animal Carcinogen |
| A2 - Suspected Human Carcinogen |

### Mobility in Environmental Media:

| Environmental Stability: | Not available. |
| Environmental Fate: | Not available. |
| Bioaccumulation: | Not available. |
| Biodegradation: | Not available. |

### Applications: 01/14/2013
 SECTION 13 : DISPOSAL CONSIDERATIONS

Applies to Product:

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

 SECTION 14 : TRANSPORT INFORMATION

IATA Shipping Name: Not Regulated.

MEX Shipping Name: Not Regulated.

 SECTION 15 : REGULATORY INFORMATION

Inventory Status

<table>
<thead>
<tr>
<th></th>
<th>Japan ENCS</th>
<th>Philippines PICCS</th>
<th>China</th>
<th>South Korea KECL</th>
<th>Australia AICS</th>
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<tr>
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<td>Listed KECL Number KE-35185</td>
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<td>Cured Binder</td>
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<table>
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 SECTION 16 : ADDITIONAL INFORMATION

SDS Creation Date: December 16, 1997
SDS Revision Date: January 14, 2013
MSDS Revision Notes: Section 11 Updated with 2011 NTP Evaluation
MSDS Author: KK
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