SAFETY DATA SHEET

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 Corning 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
Skin 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
**Chemical Name** | **CAS#** | **Ingredient Percent**
--- | --- | ---
Urea, polymer with formaldehyde and phenol | 25104-55-6 | 5 - 20 by weight
Cured Binder | N/A | 4 - 15 by weight
Fiber Glass (Wool) | 65997-17-3 | 85 - 96 by weight

**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.

**Hazardous Combustion Byproducts:** Carbon monoxide.
- Carbon dioxide.
- Ammonia.
- Other undetermined compounds could be released in small quantities.

**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. Product should be kept dry and undercover.

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 system 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 REL-Ceiling/Peak: 0.1 ppm</td>
<td>REL-Ceiling/Peak: 0.3 ppm</td>
<td>TWAEV-Ceiling/peak: 0.3 ppm</td>
<td>LMPE-Ceiling/Peak: 2 ppm</td>
<td></td>
</tr>
<tr>
<td>Fiber Glass (Wool)</td>
<td>REL-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 STEL: 0.6 mg/m3</td>
<td>TWA: 0.15 mg/m3</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

700 Series Board, Serie 700 de Fiberglas
Product Code: 17020-SAM-EN
Revision: 01/14/2013
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:

Acute Toxicity:
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:

<table>
<thead>
<tr>
<th>Carcinogen</th>
<th>ACGIH</th>
<th>IARC</th>
<th>Canada</th>
<th>MEXICO</th>
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</thead>
<tbody>
<tr>
<td>Formaldehyde</td>
<td>Group 1 - Carcinogenic to humans.</td>
<td>A2 - Suspected Human Carcinogen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cured Binder</td>
<td>No Data</td>
<td>No Data</td>
<td>No Data</td>
<td>No Data</td>
</tr>
<tr>
<td>Fiber Glass (Wool)</td>
<td>A3 Animal Carcinogen</td>
<td>Group 3 - Not Classifiable as to its Carcinogenicity to Humans.</td>
<td>A3 Animal Carcinogen</td>
<td></td>
</tr>
</tbody>
</table>

Sensitization: No information available.
Mutagenicity: No information available.
Reproductive Toxicity: No information available.
Teratogenicity: No information available.
Neurological Effects: No information available.

Formaldehyde:
Eye: Eye - Rabbit Standard Draize test. : 750 ug - [severe ](RTECS)
Skin: Skin - Rabbit; Standard Draize test. : 2 mg/24H; severe. (RTECS) Skin - Rabbit; LD50 : 270 mg/Kg; Details of toxic effects not reported other than lethal dose value. (RTECS)
Inhalation: Inhalation - Rat LC50: 250 ppm/2H - [Behavioral - Tetany Behavioral - Coma Lungs, Thorax, or Respiration - Acute pulmonary edema ] Inhalation - Rat LC50: 201 mg/m3 [Peripheral Nerve and Sensation - Spastic paralysis with or without sensory change; Behavioral - Convolusions or effect on seizure threshold; Behavioral - Excitement] Inhalation - Mouse LC50: 454 mg/m3/4H - [Details of toxic effects not reported other than lethal dose value] (RTECS) Inhalation - Mouse LC50: 505 mg/m3/2H - [Behavioral - Tetany Behavioral - Coma Lungs, Thorax, or Respiration - Acute pulmonary edema ] (RTECS)
Ingestion: Ingestion - Rat LD50: 100 mg/kg [Details of toxic effects not reported other than lethal dose value] Inhalation - Mouse LD50: 42 mg/kg [Behavioral - Somnolence (general depressed activity); Behavioral - Conslusions or effect on seizure threshold; Behavioral - Excitement] Inhalation - Mouse LD50: 385 mg/kg [Details of toxic effects not reported other than lethal dose value] Inhalation - Mouse LD50: 300 mg/kg [Behavioral - Tremor; Liver - Other changes; Kidney/Ureter/Bladder - Other changes] Inhalation - Rat LD50: 500 mg/kg [Behavioral - Tremor; Liver - Other changes; Kidney/Ureter/Bladder - Other changes ](RTECS)
Carcinogenicity: The International Agency for Research on Cancer (IARC) convened a working group of twenty-six scientists from ten countries in June 2004 to assess the carcinogenic hazard to humans of formaldehyde. The proceedings of that meeting have not yet been published. Based upon a press 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 were 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.

Cured Binder:
Ingestion: Ingestion - Rat LD50: 7 gm/kg - [Autonomic Nervous System - Other (direct) parasympathomimetic Behavioral - Muscular weakness Lungs, Thorax, or Respiration - Respiratory depression](RTECS)
Carcinogenicity: The International Agency for Research on Cancer (IARC) convened a
A working group of twenty-six scientists from ten countries in June 2004 to assess the carcinogenic hazard to humans of formaldehyde. The proceedings of that meeting have not yet been published. Based upon a press release 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 were 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.

**Fiber Glass (Wool):**

**Chronic Effects:** In June 2011, The National Toxicology Program (NTP) removed biosoluble glass wool fibers from its list of possible carcinogens used for home and building insulation. 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.

### SECTION 12 - ECOLOGICAL INFORMATION

** Applies to Product:**

<table>
<thead>
<tr>
<th>Ecotoxicity:</th>
<th>This material is not expected to cause harm to animals, plants or fish.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Stability:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Environmental Fate:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Bioaccumulation:</td>
<td>Not available.</td>
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<tr>
<td>Biodegradation:</td>
<td>Not available.</td>
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<tr>
<td>Mobility In Environmental Media:</td>
<td>Not available.</td>
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</table>

### 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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<tbody>
<tr>
<td>Urea, polymer with formaldehyde and phenol</td>
<td>Listed</td>
<td>Listed; KE-35185</td>
<td>Listed</td>
<td>Not listed; Assessed by NICNAS: No</td>
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<tr>
<td>Cured Binder</td>
<td>Not listed</td>
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<td>RE-35185</td>
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<tr>
<td>Fiber Glass (Wool)</td>
<td>Not listed</td>
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#### TSCA Inventory Status

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<tr>
<td>Cured Binder</td>
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<td>Fiber Glass (Wool)</td>
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### SECTION 16 - ADDITIONAL INFORMATION

700 Series Board, Serie 700 de Fiberglas  
Revision: 01/14/2013  
Product Code: 17020-SAMEN