SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name: Foamular® Extruded Polystyrene Insulation
MSDS Manufacturer Number: 21528-NAM
Manufacturer Name: Owens Corning Foam Insulation, 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: 1-419-248-8234 (8am-5pm ET)
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)
Canutec: (613) 996-6666 (Canada 24 hours everyday)
Website: www.owenscorning.com
MSDS Creation Date: March 05, 1997
MSDS Revision Date: October 25, 2010

NFPA
0 1 0
HMIS
Health Hazard 0
Fire Hazard 1
Reactivity 0
Personal Protection X
* Chronic Health Effects

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>Ingredient Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polystyrene</td>
<td>9003-53-6</td>
<td>80 - 90 by weight</td>
</tr>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>0 - 2 by weight</td>
</tr>
<tr>
<td>1-Chloro-1, 1-difluoroethane (HCFC-142B)</td>
<td>75-68-3</td>
<td>7 - 12 by weight</td>
</tr>
<tr>
<td>Hexabromocyclododecane</td>
<td>3194-55-6</td>
<td>0.5 - 1.5 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 3 - HAZARDS IDENTIFICATION

Applies to Product

Emergency Overview: Dense Black Smoke will be produced during a fire. Grinding, sawing or fabrication activities can produce dust particles which under certain conditions may ignite or form explosive dust atmospheres.
Route of Exposure:

- Eye contact
- Inhalation

Potential Health Effects:

**Eye:** Dust may cause slight irritation.

**Skin:** No effects expected.

**Inhalation:** Dust 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.

Carcinogenicity: This material is not considered a carcinogen.

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.

OSHA Regulatory Status: This product is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Appearance and Odor: Pink, white or green closed-cell foam board with no odor.

### 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:**
Immediately wash skin with soap and plenty of water. Get medical attention if irritation develops or persists.

**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. If symptoms persist, call a physician.

### SECTION 5 - FIRE FIGHTING MEASURES

**Flammable Properties:** Non Flammable.

**Flash Point:**
> 615 °F (324 °C)

**Flash Point Method:**
ASTM D 1929

**Auto Ignition Temperature:**
Not applicable.

**Lower Flammable/Explosive Limit:**
Not applicable.

**Upper Flammable/Explosive Limit:**
Not applicable.

**Extinguishing Media:**
dry chemical
foam
carbon dioxide (CO2)
water fog

**Unsuitable Media:**
None.

**Protective Equipment:**
Wear self-contained breathing apparatus (SCBA) and full fire fighting protective gear.

**Unusual Fire Hazards:**
Grinding, sawing or fabrication activities can produce dust particles which under certain conditions may ignite or form explosive dust atmospheres.

**Hazardous Combustion Byproducts:**
Carbon monoxide.
Carbon dioxide.
styrene.
Small quantities of hydrogen fluoride, hydrogen chloride, fluorine and chlorine could be released. Other undetermined compounds could be released in small quantities.

**HCFC-142b thermally decomposes at >430°C (850°F). Decomposition products include: Hydrogen fluoride, hydrogen chloride, fluorine, and chlorine.

**Universal Fire And Explosion Hazards:**
Not available.

**NFPA Ratings:**

- NFPA Health: 0
- NFPA Flammability: 1
- NFPA Reactivity: 0
SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personnel Precautions: Avoid contact with skin and eyes.

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. Avoid dry sweeping. Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water.

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.

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. Grinding, cutting, sawing or fabrication activities that cut large numbers of interior foam cells can release localized amounts of flammable residual blowing agent or release dust particles that under certain conditions may ignite or form explosive dust atmospheres.

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.

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

EXPOSURE GUIDELINES

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Guideline OSHA</th>
<th>Guideline NEOSH</th>
<th>Guideline ACGIH</th>
<th>Ontario Canada</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polystyrene</td>
<td>5 mg/m³, Respirable, 10 mg/m³, Total Particulates Not Otherwise Classified (PNOC)</td>
<td>3 mg/m³, respirable, 10 mg/m³, inhalable particles (NOS)</td>
<td>3 mg/m³, respirable, 10 mg/m³, inhalable Particulates (Insoluble) Not Otherwise Classified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talc</td>
<td>REL-TWA: 2 mg/m³ (Respirable)</td>
<td>TLV-TWA: 2 mg/m³ (Respirable)</td>
<td>TWA-EV-TWA: 2 mg/m³ (Respirable)</td>
<td>VEMP-TWA: 3 mg/m³ (Respirable)</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

Physical State: Solid.

Physical State Appearance: Foam.

Color: Pink, white or green

Odor: No detectable odor.

Boiling Point: Decomposes over 600 °F (316 °C)

Melting Point: Softens @ 220 °F (104 °C)

Specific Gravity: 0.021–0.064 (Ref: water = 1).

Solubility: Insoluble in water

Vapor Density: No Data

Vapor Pressure: No Data

Evaporation Rate: No Data

pH: No Data
Flash Point: > 615 °F (324 °C)
Flash Point Method: ASTM D 1929
Auto Ignition Temperature: Not applicable.

SECTION 10 - STABILITY and REACTIVITY

Chemical Stability: Stable under normal conditions.
Hazardous Polymerization: Hazardous polymerization does not occur.
Conditions to Avoid: Dust dispersion in air.
Incompatible Materials: Hydrocarbons, esters, amines
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.

<table>
<thead>
<tr>
<th>Carcinogen</th>
<th>ACGIH</th>
<th>NEOSH</th>
<th>OSHA</th>
<th>IARC</th>
<th>NTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polystyrene</td>
<td>No Data</td>
<td>No Data</td>
<td>No Data</td>
<td>Group 3 - Not Classifiable as to its Carcinogenicity to Humans</td>
<td>No Data</td>
</tr>
<tr>
<td>Talc</td>
<td>A4 Not Classifiable as a Human Carcinogen</td>
<td>No Data</td>
<td>No Data</td>
<td>No Data</td>
<td>No Data</td>
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<tr>
<td>1-Chloro-1, 1-difluoroethane (HCFC-142B)</td>
<td>No Data</td>
<td>No Data</td>
<td>No Data</td>
<td>No Data</td>
<td>No Data</td>
</tr>
<tr>
<td>Hexabromocyclododecane</td>
<td>No Data</td>
<td>No Data</td>
<td>No Data</td>
<td>No Data</td>
<td>No Data</td>
</tr>
</tbody>
</table>

Applies to Product:

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

Talc:

Skin: Skin - Human Standard Draize Test: > 300 ug/3D-I - [mild](RTECS)
Inhalation: Inhalation - Rat TCLo: 17 mg/m3/6H/26D (intermittent) [Lungs, Thorax, or Respiration - other changes] Inhalation - Mouse TCLo: 20400 ug/m3/6H/26D (intermittent) [Lungs, Thorax, or Respiration - other changes] Inhalation - Rat TCLo: 18 mg/m3/6H/2Y (intermittent) [Tumorigenic - carcinogenic by RTECS criteria; Lungs, Thorax, or Respiration - bronchiogenic carcinoma; Endocrine - tumors] Inhalation - Rat TC: 11 mg/m3/1Y (intermittent) [Tumorigenic - equivocal tumorigenic agent by RTECS criteria; Lungs, Thorax, or Respiration - tumors](RTECS)

1-Chloro-1, 1-difluoroethane (HCFC-142B):

Inhalation: Inhalation - Mouse LC50: 1758000 mg/m3/2H [Details of toxic effects not reported other than lethal dose value] Inhalation - Rat LC50: 2050000 mg/m3/4H [Details of toxic effects not reported other than lethal dose value](RTECS)

Hexabromocyclododecane:

Skin: Skin - Rabbit LD50: >8 gm/kg [Details of toxic effects not reported other than lethal dose value](RTECS)
Ingestion: Inhalation - Rat LD50: >10 gm/kg [Details of toxic effects not reported other than lethal dose value](RTECS)

SECTION 12 - ECOLOGICAL INFORMATION
**Section 13 - Disposal Considerations**

*Applies to Product:*

- **Waste Disposal:** Dispose in accordance with Local, State, Federal and Provincial regulations.
- **Contaminated Packaging:** Empty containers should be taken for local recycling, recovery or waste disposal.
- **RCRA Number:** No EPA Waste Numbers are applicable for this product's components.
- **RCRA Characteristics:** This material is not expected to be a characteristic hazardous waste under RCRA.

**Section 14 - Transport Information**

- **DOT Shipping Name:** Not Regulated.
- **IATA Shipping Name:** Not Regulated.
- **Canadian Shipping Name:** Not Regulated.
- **IMDG Shipping Name:** Not Regulated.
- **ADR Shipping Name:** Not Regulated.
- **RID Shipping Name:** Not Regulated.
- **ICAO Shipping Name:** Not Regulated.
- **MEX Shipping Name:** Not Regulated.

**Section 15 - Regulatory Information**

### Inventory Status

<table>
<thead>
<tr>
<th>Material</th>
<th>Japan ENCS</th>
<th>ELINCS</th>
<th>EINECS Number</th>
<th>Philippines PICCS</th>
<th>South Korea KECL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polystyrene</td>
<td>(6)-120</td>
<td>500-008-9</td>
<td>500-008-9</td>
<td>KE-13257</td>
<td></td>
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<tr>
<td>Talc</td>
<td></td>
<td>238-877-9</td>
<td></td>
<td>KE-32773</td>
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<tr>
<td>1-Chloro-1,1-difluoroethane (HCFC-142B)</td>
<td></td>
<td>200-891-8</td>
<td>Listed</td>
<td>KE-05597</td>
<td></td>
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<tr>
<td>Hexabromocyclododecane</td>
<td></td>
<td>221-695-9</td>
<td>Listed</td>
<td>KE-18398</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Material</th>
<th>Australia AICS</th>
<th>Canada DSL</th>
<th>EINECS Inventory Status</th>
<th>TSCA Inventory Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polystyrene</td>
<td>Listed</td>
<td>Listed</td>
<td>No</td>
<td>Listed</td>
</tr>
<tr>
<td>Talc</td>
<td>Listed</td>
<td>Listed</td>
<td>Yes</td>
<td>Listed</td>
</tr>
<tr>
<td>1-Chloro-1,1-difluoroethane (HCFC-142B)</td>
<td>Listed</td>
<td>Listed</td>
<td>Yes</td>
<td>Listed</td>
</tr>
<tr>
<td>Hexabromocyclododecane</td>
<td>Listed</td>
<td>Listed</td>
<td>Yes</td>
<td>Listed</td>
</tr>
</tbody>
</table>

**Applies to Product:**

- **Canada Reg. Status:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations.
- **Canada WHMIS:** Not controlled.
- **CA PROP 65:** The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):
  - This product does not contain any Proposition 65 chemicals.
- **Section 311/312 Hazard Categories:**
  - Acute Health Hazard: No
  - Chronic Health Hazard: No
  - Risk of ignition: No
  - Sudden Release of Pressure Hazard: No
  - Reactive Hazard: No
- **Clean Air Act:** This product does not contain any Hazardous Air Pollutants (HAPs).
1-Chloro-1, 1-difluoroethane (HCFC-142B):

Canada IDL: Identified under the Canadian Hazardous Products Act Ingredient Disclosure List: 1%. Item: 357(425)

Section 313: Listed

State Right To Know

Talc

All State Information:

1-Chloro-1, 1-difluoroethane (HCFC-142B)

Polystyrene  RI  MN  IL  PA  MA
Talc  Listed  No Data  No Data  No Data  No Data
1-Chloro-1, 1-difluoroethane (HCFC-142B)  No Data  No Data  No Data  Listed  Listed
Hexabromocyclododecane  No Data  No Data  No Data  No Data  No Data

N.J

Polystyrene  No Data
Talc  No Data
1-Chloro-1, 1-difluoroethane (HCFC-142B)  Listed
Hexabromocyclododecane  No Data

SECTION 16 - ADDITIONAL INFORMATION

HMIS Health Hazard:  0
HMIS Fire Hazard:  1
HMIS Reactivity:  0
HMIS Personal Protection:  X
MSDS Creation Date:  March 05, 1997
MSDS Revision Date:  October 25, 2010
MSDS Revision Notes:  Added new product

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