1. PRODUCT and COMPANY IDENTIFICATION

Generic Product Name: Celfort® Extruded Polystyrene Insulation

Common name: Celfort® 200, Celfort® 200 Cel-Lok® System, CodeBord (Celfort® 200), Celfort® 300, Celfort® 200 Cel-Drain, Foamular® 350, Foamular® 400, Foamular® 600, Foamular® 1000, Foamular® THERMAPINK®, Pipe Fabrication Billet

MSDS No.: 24901-NAM-EN

Recommended Use: Insulation

Contact manufacturer: Owens Corning foam insulation, 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:
Dense Black Smoke will be produced during a fire
Grinding, sawing, or fabrication activities can produce dust particles which may under certain conditions form explosive dust atmospheres that can be ignited.

Appearance: Pink, White, Green
Physical State: Solid
Odor: Odorless
Potential Health Effects
Principle Routes of Exposure

Eye
Inhalation

Acute Effects
- Eyes: Dust may cause slight irritation
- Skin: No effects expected
- Inhalation: Dust 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 is not considered a carcinogen

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>9003-53-6</td>
<td>Polystyrene</td>
<td>60-100</td>
</tr>
<tr>
<td>75-68-3</td>
<td>HCFC-142b</td>
<td>7-13</td>
</tr>
<tr>
<td>3194-55-6</td>
<td>Hexabromocyclododecane (HBCD)</td>
<td>0-1.5</td>
</tr>
<tr>
<td>75-45-6</td>
<td>HCFC-22</td>
<td>1-5</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 water.
- If skin irritation persists, 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

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)
  ▪ 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 and HCFC-22 thermally decomposes at > 430°C (850°F). Decomposition products include:
  ▪ Hydrogen Fluoride
  ▪ Hydrogen Chloride
  ▪ Fluorine
  ▪ Chlorine

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

Special Hazards Arising from the Chemical
Grinding, sawing, or fabrication activities of the pellets can produce dust particles which may under certain conditions form an explosive dust atmosphere that can be ignited.

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 eyes and inhalation.

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 to clean up dust
  ▪ 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>
</tr>
</thead>
<tbody>
<tr>
<td>Polystyrene 9003-53-6</td>
<td>10 mg/m³ (inhalable particulate) 3 mg/m³ (respirable fraction – PNOC)</td>
<td>15 mg/m³ (total dust) 5 mg/m³ (respirable fraction – PNOC)</td>
</tr>
<tr>
<td>HCFC-22 75-45-6</td>
<td>1000 ppm – TWA</td>
<td>1000 ppm - TWA</td>
</tr>
</tbody>
</table>

#### Engineering Controls

- Provide local exhaust and/or general ventilation to maintain exposure below regulatory and recommended limits.
- Grinding, sawing or fabrication activities of the Foamular® board can produce dust particles which may under certain conditions form explosive dust atmospheres that can be ignited.
- 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.

**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
- Remove and wash contaminated clothing before re-use

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**

Pink, white, green

**Odor**

Odorless

**Physical State**

Solid

**pH**

Does not apply

**Flash point**

>615°F/324°C Method ASTM D1929

**Autoignition temperature**

Does not apply

**Boiling Point**

Decomposes over 600°F/316°C

**Melting point/range**

Softens @ 220°F/104°C

**Flammability Limits in Air**

lower / upper /

**Explosive properties**

Not available

**Oxidizing properties**

Does not apply

**Vapor Pressure**

Does not apply

**Specific Gravity**

0.021-0.064 (water=1)

**Water solubility**

Insoluble

**VOC content**

Not available

### 10. STABILITY AND REACTIVITY

**Chemical Stability**

Stable

**Conditions to avoid**

Dispersion of dust in air
Incompatible Materials
Hydrocarbons
Esters
Amines

Hazardous decomposition products
- Carbon Monoxide
- Carbon Dioxide (CO2)
- 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
- Chlorine

Possibility of Hazardous Reactions
Hazardous polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Acute toxicity
General Product Information
Dusts from cutting and drilling 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>CAS #</th>
<th>LD50 Oral</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCFC-142b</td>
<td>75-68-3</td>
<td></td>
<td>2050 gm/m³ 4H Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1758 gm/m³ 2H Mouse</td>
</tr>
<tr>
<td>HCFC-22</td>
<td>75-45-6</td>
<td></td>
<td>35 ppm/15M Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1380 mg/m³ 2H Mouse</td>
</tr>
</tbody>
</table>

Chronic toxicity

Component Analysis

<table>
<thead>
<tr>
<th></th>
<th>ACGIH</th>
<th>IARC</th>
<th>OSHA</th>
<th>NTP</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polystyrene 9003-53-6</td>
<td></td>
<td>Group 3 not classifiable</td>
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<td>--</td>
<td>--</td>
</tr>
<tr>
<td>HCFC-22 75-45-6</td>
<td>A4</td>
<td>not classifiable</td>
<td>Group 3 not classifiable</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

Persistence/Degradability Not available
Bioaccumulation/Accumulation Not available
Mobility in Environmental Media Not available

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>CAS #</th>
<th>TSCA</th>
<th>DSL</th>
<th>EINECS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polystyrene</td>
<td>9003-53-6</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>HCFC-142b</td>
<td>75-68-3</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Hexabromocyclododecane</td>
<td>3194-55-6</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>HCFC-22</td>
<td>75-45-6</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

USA
Federal Regulations

SARA 313 Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)
This product does contain a chemical which is subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

HCFC-142b – form R reporting required for 1.0% de minimis concentration
HCFC-22 – form R reporting required for 1.0% de minimis concentration
SARA 311/312 Hazardous Categorization

Acute Health Hazards  no
Chronic Health Hazards no
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

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>HCFC-142b</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCFC-22</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></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>1% item</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCFC-142b</td>
<td>75-68-3</td>
<td>item 357 (425)</td>
</tr>
<tr>
<td>HCFC-22</td>
<td>75-45-6</td>
<td>item 358 (426)</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  Not Controlled
WHMIS Classification  None

16. OTHER INFORMATION

Preparation Date: 2-May-2001
Revision Date 16-July-2007
Revision Summary Format was changed, new 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