1. PRODUCT and COMPANY IDENTIFICATION

Generic Product Name: Heavy Density Pipe Insulation

Common name: ASJ 25 Pipe Insulation, ASJ/SSL II® Pipe Insulation, Heavy Density Pipe Insulation, No-Wrap Pipe Insulation, Pipeshield, SSL® Pipe Insulation, SSL-II® Pipe Insulation, VaporWick®, Vitro Fibras Pipe Insulation, Evolution™ Paper-Free ASJ

MSDS No.: 18994-NAM

Recommended Use: Pipe 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:
Acrid smoke, gases or vapors may be released in high temperature applications or a sustained fire.

Appearance: Tan, with or without paper or aluminized jacket
Physical State: Solid, Fibrous
Odor: Faint Resin

Potential Health Effects:
Eye
Skin Contact
Inhalation

Preparation Date: 16-May-1995
Revision Date: 24-May-2007
Revision Number: 11
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>60-100</td>
</tr>
<tr>
<td>25104-55-6</td>
<td>Cured Binder (Urea, polymer with formaldehyde and phenol)</td>
<td>0-40</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
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
                                Aldehydes
                                Formaldehyde
                                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  
Acrid smoke, gases or vapors may be released in a sustained fire.

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

NFPA  Health 1  Flammability 0  Reactivity 0  Special Instructions: none

6. ACCIDENTAL RELEASE MEASURES

Personal precautions  Avoid contact with the skin and the eyes.

Methods for Containment  
• Material will settle out of air
• Material will disperse in water and cannot easily be removed after it is waterborne.
• Prevent from spreading by covering or other means

Methods for Clean-up  
• Pick or scoop up material and put into a suitable container for disposal as a non-hazardous waste.
• Avoid dry sweeping
• Use an industrial vacuum cleaner with a high efficiency filter to clean up dust and fiber contamination
• After cleaning, flush away traces with water

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.
### 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 65997-17-3</td>
<td>1 f/cc (respirable) 10 mg/m³ (inhalable synthetic vitreous fibers) 3 mg/m³ (respirable fraction - PNOC)</td>
<td>1 f/cc (respirable)</td>
<td>STEL – 0.6 mg/m³  TWA – 0.05 mg/m³ TWA – 1 f/cc</td>
<td>TWA – 0.15 mg/m³</td>
</tr>
<tr>
<td>Formaldehyde 50-00-0</td>
<td>0.3 ppm (ceiling)</td>
<td></td>
<td>STEL – 2 ppm  STEL – 3 mg/m³  TWA – 1 ppm  TWA – 15 mg/m³</td>
<td>3 mg/m³ – Ceiling 2 ppm - Ceiling</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)
- A dust mask can be worn to as a precautionary measure to avoid slight irritation of the respiratory system

**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

- **Appearance**: Tan, with or without paper or aluminized plastic film jacket
- **Odor**: Faint resin (organic)
- **Physical State**: Solid, fibrous
- **pH**: Does not apply
- **Flash point**: Not available
- **Autoignition temperature**: Does not apply
- **Boiling Point**: Does not apply
- **Melting point/range**: Not available
- **Flammability Limits in Air**: lower / upper /
- **Explosive properties**: Does not apply
- **Oxidizing properties**: Does not apply
- **Vapor Pressure**: Does not apply
- **Specific Gravity**: Does not apply
- **Water solubility**: Insoluble
- **VOC content**: Not available
10. STABILITY AND REACTIVITY

Chemical Stability
Stable

Conditions to avoid
None expected

Incompatible Materials
None expected

Hazardous decomposition products
Formation: (formaldehyde only released with high temperatures and humidity)
Ammonia
Carbon Monoxide

Possibility of Hazardous Reactions
Hazardous polymerization does not occur

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.

If product is subjected to high temperature processing, or if product is applied to hot surfaces, formaldehyde gas may be released.

Component Analysis – LD50/LC50

<table>
<thead>
<tr>
<th></th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cured Binder (Urea, polymer with formaldehyde and phenol)</td>
<td>7 g/kg Rat</td>
<td>270 mg/kg Rabbit</td>
<td>0.578 mg/L 4H Rat</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>100 mg/kg Rat</td>
<td>250 ppm 4H Rat</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>Component</th>
<th>ACGIH</th>
<th>IARC</th>
<th>OSHA</th>
<th>NTP</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber Glass, Wool</td>
<td>A3</td>
<td>Group 3</td>
<td>X</td>
<td>Reasonably Anticipated</td>
<td>A3 animal carcinogen</td>
</tr>
<tr>
<td>65997-17-3</td>
<td></td>
<td>not classifiable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formaldehyde 50-00-0</td>
<td>A2</td>
<td>Group 1</td>
<td>X</td>
<td>---</td>
<td>A2 animal carcinogen</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Carcinogenic to humans</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

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>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>-</td>
<td>Present</td>
<td>KE-17630</td>
<td>GEN-0994</td>
<td>Present</td>
<td></td>
</tr>
<tr>
<td>Cured Binder (Urea, polymer with formaldehyde and phenol) 25104-55-6</td>
<td>XU</td>
<td>Present</td>
<td>-</td>
<td>-</td>
<td>7-907</td>
<td>Present</td>
<td>KE-35185</td>
<td>-</td>
<td></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

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

<table>
<thead>
<tr>
<th>Preparation Date:</th>
<th>16-May-1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision Date</td>
<td>24-May-2007</td>
</tr>
<tr>
<td>Revision Summary</td>
<td>New product name was added</td>
</tr>
</tbody>
</table>

**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