1. PRODUCT AND COMPANY IDENTIFICATION

| COMMON NAME: | ABS Foam Core Pipe |
| CHEMICAL NAME: | Not Applicable. Formulation, see section 3. |
| FORMULA: | Mixture |
| PRODUCT CAS NO.: | Mixture, see section 3. |
| Recommended Use: | Drain Waste and Vent Pipe (Reference ASTM F628 standard) |
| SUPPLIER: | Charlotte Pipe and Foundry Company (Plastics Division) |
| ADDRESS: | 4210 Old Charlotte Highway |
| CITY, STATE, ZIP: | Monroe, NC 28110 |
| PHONE: | +1-704-372-3650 |
| EMERGENCY PHONE: | +1-704-372-3650 |

2. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW**

Toxic and irritating gases and fumes may be given off during burning or thermal decomposition. Avoid generating dust. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

GHS Status

This material is hazardous in accordance with the hazard communication standard, 29 CFR 1910.1200

Classification of the substance or mixture

Skin irritation – Category 2

Eye irritation – Category 2 B

Carcinogenicity – Category 2

Health hazard.

GHS label pictogram

Signal word

Warning

Hazard statements

Causes eye irritation.
Causes skin irritation.
Suspected of causing cancer if inhaled.

Precautionary statements
Prevention
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective breathing gear, such as an N95 or P95 respirator. Wash skin thoroughly after handling.

Response
If on skin: wash with plenty of water. If in eyes. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Storage
Keep away from intense heat, flames. Store locked up.

Disposal
Dispose of in accordance with local regulations.

Hazards not otherwise classified
None known.

Relevant routes of exposure
Skin, eyes, inhalation.

Inhalation
Melted product is flammable and produces intense heat and dense smoke during burning. Irritating gases and fumes may be given off during burning or thermal decomposition.

Skin contact
May cause allergic reaction.

Eye contact
No data available.

Ingestion
No data available.

### 3. HAZARDOUS INGREDIENTS: COMPOSITION/INFORMATION

<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>% WEIGHT</th>
<th>PEL-OSHA</th>
<th>TLV-ACGIH</th>
<th>NIOSH REL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylonitrile Butadiene Styrene</td>
<td>95 - 100</td>
<td>None established for ABS Particulates not otherwise classified: 15 mg/m3</td>
<td>None Established for ABS Particulates not otherwise classified: 10 mg/m3 (inhalable fraction)</td>
<td>None established</td>
</tr>
<tr>
<td>CAS 9003-56-9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corn oil</td>
<td>0 - 3</td>
<td>Vegetable oil: 5 mg/m3 (PEL, respirable fraction) 15 mg/m3 (PEL, total dust)</td>
<td>10 mg/m3 (8-hour TWA)</td>
<td>Vegetable oil mist: 10 mg/m3 (total TWA)</td>
</tr>
<tr>
<td>CAS 8001-30-7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon black</td>
<td>0 - 2</td>
<td>3.5 mg/m3 (TWA)</td>
<td>3.0 mg/m3 (TWA)</td>
<td>3.5 mg/m3 (TWA)</td>
</tr>
<tr>
<td>CAS 1333-86-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C,C'-azodi(formamide)</td>
<td>1.5%</td>
<td>None established</td>
<td>None established</td>
<td>None established</td>
</tr>
<tr>
<td>123-77-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Titanium dioxide  
CAS 13463-67-7  
Less than 0.5%  
15 mg/m3, total dust  
10 mg/m3 TWA  
None established

Vinyl acetate polymer with ethylene  
Less than 0.4%  
None established  
None established  
None established

Proprietary Additive 3  
Less than 0.08%  
None established  
None established  
None established

4. FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes.

SKIN CONTACT: Rinse with water. Remove contaminated clothing and shoes. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes before reuse.

INHALATION: If vapors from excessive heating, burning or decomposition products are inhaled: remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular, or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing, such as collar, tie, belt, or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance.

INGESTION: Wash out mouth with water. Remove dentures, if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Loosen tight clothing, such as collar, tie, belt, or waistband.

Notes to physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under surveillance for 48 hours

Specific treatments: None known

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: 388-400°C (730-752°F)  
Decomposition products may be combustible.

FLAMMABLE LIMITS:  
LEL: No Data  
UEL: No data

EXTINGUISHING MEDIA: Use media appropriate for surrounding fire.

FIRE AND EXPLOSION HAZARDS: Thermal decomposition may produce carbon dioxide, carbon monoxide, nitrogen oxides, sulfur oxides, halogenated compounds, and metal oxide/oxides.

PROTECTIVE MEASURES FOR FIRE FIGHTERS: Firefighters must wear a NIOSH-approved, full-face piece self-contained breathing apparatus (SCBA) operated in positive pressure mode and full turnout or bunker gear with additional chemical protective clothing as necessary to protect against thermal decomposition products.

SPECIAL PROTECTIVE ACTIONS FOR FIRE FIGHTERS: If there is a fire, promptly isolate the scene by removing all
6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency measures
For non-emergency personnel
No action shall be taken involving any personal risk or without suitable training.
Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders
If specialized clothing is required to deal with decomposition products or fumes from burning or excessive heating, take note of information in Section 8 on suitable and unsuitable materials. See also information in “for non-emergency personnel.”

Environmental precautions
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

Methods and materials for containment and clean-up
Small spill
Avoid dust generation. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. See Section 1 for emergency contact information.

Large spill
Move containers from spill area. Approach release from upwind. Prevent entry into sewers, waterways, basements, and confined areas. Avoid dust generation. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. See Section 1 for emergency contact information.

7. HANDLING AND STORAGE

Conditions for safe storage, including any incompatibilities
Store in a dry place away from direct sunlight, heat, and incompatible materials. Avoid intense heat and flames.

Precautions for safe handling
Put on appropriate personal protective equipment (see Section 8). Do not handle until all safety precautions have been read and understood. Do not get particles, vapors or fumes in eyes, on skin, or on clothing. Do not ingest. If during normal use, the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator.

Advice on general occupational hygiene
Employees must wash hands and face before eating, drinking, or smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also section 8 for additional information on hygiene measures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below recommended and statutory limits.

RESPIRATORY PROTECTION: Cutting or sanding this product can generate dust. Used a properly fitted particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be
based on known or anticipated exposure levels, the hazards of the product, and the safe working limits of the respirator. A NIOSH-approved N95 single use or P95 multiple use respirator will protect the employee from at least 95% of airborne particles. Follow the respirator manufacturer’s instructions for proper use. If adhesives or other substances are used with this product, refer to the product manufacturer’s safety data sheet for applicable respiratory protective measures.

SKIN PROTECTION: Chemical-resistant, impervious gloves complying with an approved standard should be worn when handling this or any chemical product, if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures containing several substances, the protection time of the gloves cannot be accurately estimated. If adhesives or other substances are used with this product, refer to the product manufacturer’s safety data sheet for applicable skin protective measures.

BODY PROTECTION: Personal protective equipment for the body should be selected on the task being performed and the risks involved, and should be approved by a specialist before handling this product. If adhesives or other substances are used with this product, refer to the product manufacturer’s safety data sheet for applicable skin protective measures.

EYE/FACE PROTECTION: Safety eyewear complying with an approved standard must be used when a risk assessment indicates this is necessary to avoid exposure to dust. Particulates and dust can be formed when cutting, grinding or sanding this product. If contact with dust or particulates is possible, the following should be worn unless the assessment indicates a higher degree of protection: safety glasses with side shields. If adhesives or other substances are used with this product, refer to the product manufacturer’s safety data sheet for applicable eye and face protective measures.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th><strong>APPEARANCE:</strong></th>
<th>Solid. Black.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ODOR:</strong></td>
<td>Slight, sweet, aromatic.</td>
</tr>
<tr>
<td><strong>ODOR THRESHOLD:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>BOILING POINT:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>FLASH POINT:</strong></td>
<td>388-400°C (730-752°F)</td>
</tr>
<tr>
<td><strong>FLAMMABILITY:</strong></td>
<td>Melted product is flammable.</td>
</tr>
<tr>
<td><strong>AUTOIGNITION TEMPERATURE:</strong></td>
<td>495-510°C (923-950°F)</td>
</tr>
<tr>
<td><strong>DECOMPOSITION TEMPERATURE:</strong></td>
<td>Approximately 260°C (500°F)</td>
</tr>
<tr>
<td><strong>LOWER/UPPER EXPLOSION LIMITS:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>VAPOR PRESSURE:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>LIQUID DENSITY:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>SPECIFIC GRAVITY:</strong></td>
<td>Approximately 1.05</td>
</tr>
<tr>
<td><strong>MELTING POINT:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>pH:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>SOLUBILITY:</strong></td>
<td>Insoluble</td>
</tr>
<tr>
<td><strong>% VOLATILE:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>VISCOSITY:</strong></td>
<td>Not available</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY
### Stability:
Stable at normal temperatures and pressures.

### Reactivity:
Stable at normal temperatures and pressures.

### Conditions to avoid:
Heat, flames, sparks and other sources of ignition.

### Incompatible materials/conditions:
Consult the Charlotte Pipe and Foundry chemical resistance guide.

### Hazardous decomposition products:
Hydrogen chloride, carbon oxides, small amounts of benzene and aromatic and aliphatic hydrocarbons, phosgene.
Not available.

### Hazardous polymerization:
Not available.

### 11. TOXICOLOGICAL INFORMATION

**ACUTE TOXICITY:**
No toxicological data is available for the finished product.

**SENSITIZATION:** No data available.

**MUTAGENICITY:** No data available.

**DEVELOPMENTAL:** No data available.

**Fertility:** No data available.

**CARCINOGENICITY:** This product contains Carbon Black, which is classified by the International Agency for Research on Cancer as 2B: possibly carcinogenic to humans. Not listed on the National Toxicology Program Report on Carcinogens or OSHA Subpart Z.

**REPRODUCTIVE TOXICITY:** Not available

**TERATOGENICITY:** Not available

**SPECIFIC TARGET ORGANS – SINGLE EXPOSURE:** Not available

**SPECIFIC TARGET ORGANS – REPEATED EXPOSURE:** Not available

**ASPIRATION HAZARD:** Not available

**INFORMATION ON THE LIKELY ROUTES OF EXPOSURE:**

#### Potential acute health effects

<table>
<thead>
<tr>
<th>Route</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td>No known significant effects or critical hazards. Dust can cause eye irritation.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Skin irritant.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

#### Symptoms related to the physical, chemical, and toxicological characteristics

<table>
<thead>
<tr>
<th>Route</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td>No data available.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Skin contact | Adverse symptoms may include irritation.
Ingestion | No data available

Immediate, delayed and chronic effects from short term exposure

<table>
<thead>
<tr>
<th>Short term exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential immediate effects</td>
</tr>
<tr>
<td>Potential delayed effects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Long term exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential immediate effects</td>
</tr>
<tr>
<td>Potential delayed effects</td>
</tr>
</tbody>
</table>

Potential chronic effects

| General | No data available. |
| Carcinogenicity | May cause cancer. Risk of cancer depends on duration and level of exposure. |

12. ECOLOGICAL INFORMATION

Numerical measures of toxicity
No data available

Persistence and degradability
Does not biodegrade over time.

Bioaccumulative potential
No data available

Mobility in soil
No data available.

Other adverse effects: No known significant or critical hazards.

13. DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste should not be disposed of to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material must be disposed of in a safe way.

14. TRANSPORT INFORMATION

PROPER SHIPPING NAME: Not Regulated
15. REGULATORY INFORMATION

United States

TSCA 8(b):
All ingredients are listed on the U.S. Toxic Substances Control Act inventory.

Airborne unbound particles of carbon black of respirable size are listed as being carcinogenic per California Proposition 65.

26221-73-8 Ethene-1-octene copolymer
Proprietary Additive 3
Oxidized polyethylene

123-77-3 C,C'-azodi(formamide)
Polyethylene
Vinyl acetate polymer with ethylene

15.3. US State regulations
California Proposition 65 - This product does not contain any substances requiring labelling according to the Safe Drinking Water and Toxic Enforcement Act.

16. OTHER INFORMATION

Date of Preparation: 23 October 2014

Key To Acronyms:

CAS: Chemical Abstracts Service
CFR: Code of Federal Regulations
HEPA: High-Efficiency Particulate Air (filter)
IARC: International Agency for Research on Cancer
LD50: Lethal dose to 50% of exposed laboratory animals
LC50: Lethal concentration to 50% of exposed laboratory animals
LEL: Lower Explosive Limit
mg/l: Milligrams per liter
NIOSH: National Institute for Occupational Safety and Health (US)
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration (US)
PEL: Permissible Exposure Limit
TSCA: Toxic Substances Control Act
TLV: Threshold Limit Value – American Conference of Governmental Industrial Hygienists (ACGIH)
TWA: Time Weighted Average
UEL: Upper Explosive Limit
ug/ m³: Micrograms per cubic meter
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