FOAM-LOK™
Pipeline Utility Foam

Product Use and Design
Pipeline Utility Foam is a two component spray applied rigid urethane foam system, designed using an EPA approved Zero ODP blowing agent. Pipe Line Utility Foam may be sprayed in lift thicknesses of up to 3 feet without excessive heat buildup, splitting or scorching when applied properly.

Recommended Product Applications
- Assist in erosion control
- Provide additional support prior to the back fill of the ditch
- Protect pipes placed over rock or other hard surfaces
- Provide support under hanging pipes

Recommended Processing Parameters
Optimum hose pressure and temperature may vary as a function of the type of equipment, ambient and substrate conditions, and the specific application. It is the responsibility of the applicator to properly interpret equipment technical literature, particularly information that relates acceptable combinations of gun chamber size, proportioner output, and material pressures.

<table>
<thead>
<tr>
<th>Processing Designation</th>
<th>Pipe Utility Foam</th>
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</thead>
<tbody>
<tr>
<td>Equipment Dynamic Pressure</td>
<td>1,000 - 1,400 psi</td>
</tr>
<tr>
<td>Preheat Temperature</td>
<td>105 - 125 ºF (40 - 52º C)</td>
</tr>
<tr>
<td>Hose Heat Temperature</td>
<td>105 - 125 ºF (40 - 52º C)</td>
</tr>
<tr>
<td>Drum Storage Temperature</td>
<td>65 - 85 ºF (18 - 30 ºC)</td>
</tr>
<tr>
<td>Material Shelf Life</td>
<td>Six (6) months when stored within recommended temperature range.</td>
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</tbody>
</table>

- 2:1 transfer pumps are recommended for material transfer from container to the proportioner.
- CAUTION: Extreme care must be taken when removing and reinstalling drum transfer pumps so as NOT to reverse the “A” and “B” components.
- Do not circulate or mix other suppliers’ “A” or “B” component.

Physical Properties
Typical in-place density - 1.8- 2.2 lbs./ft³

<table>
<thead>
<tr>
<th>Properties</th>
<th>Test Method/ Requirements</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aged “R” Value</td>
<td>ASTM CS18</td>
<td>6.3 per inch</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>ASTM D1621</td>
<td>≥50 psi</td>
</tr>
<tr>
<td>Closed Cell Content</td>
<td>ASTM D2856</td>
<td>&gt;90%</td>
</tr>
</tbody>
</table>
Handling and Safety

Respiratory protection is MANDATORY! Lapolla requires that supplied air and a full face mask be used during the application of any spray applied foam system. Contact Lapolla Industries for a copy of the Model Respiratory Protection Program developed by CPI or visit their web site at www.polyurethane.org. Persons with known respiratory allergies should avoid exposure to the “A” component. The “A” component contains reactive isocyanate groups while the “B” component contains amine and/or catalysts with blowing agents. Both materials must be handled and used with adequate ventilation. The vapors must not exceed the TLV (0.02 parts per million) for isocyanates. Avoid breathing vapors. Wear a NIOSH approved respirator. If inhalation of vapors occur, remove victim from contaminated area and administer oxygen if breathing is difficult. Call a physician immediately. Avoid contact with skin, eyes, and clothing. Open containers carefully, allowing any pressure to be relieved slowly and safely. Wear chemical safety goggles and rubber gloves when handling or working with these materials. In case of eye contact, immediately flush with large amounts of water for at least fifteen minutes. Consult a physician immediately. In case of skin contact, wash area with soap and water. Wash clothes before reuse.

Positive pressure ventilation of the work area is required to minimize the accumulation of vapors in the work area during the application. Improper application techniques of this foam system must be avoided. This includes excessive thickness, off ratio material, and spraying into rising foam. The potential results of improperly applied materials may include but is not limited to, excessive heat build-up, and may result in a fire or offensive odors which may not dissipate with time and/or poor product performance due to improper density of the applied material. Large masses of sprayed materials should be avoided. When large masses are generated they should be removed from the area, cut into small pieces and allowed to cool before disposal. Failure to follow this recommendation may result in a fire. It is recommended that a fire extinguisher be located in an easily accessible portion of the work area.

Applicators should ensure the safety of the jobsite and construction personnel by posting appropriate signs warning that all “hot work” such as welding, soldering, and cutting with torches should take place no less than 35 feet from any exposed foam. If “hot work” must be performed all spray polyurethane foam should be covered with an appropriate fire or welder’s blanket, and a fire watch should be provided.

In Case of Spills or Leaks Steps To Be Taken

- Utilize appropriate personal protective equipment (PPE).
- Contain and cover spilled material with a loose, absorbent material such as oil-dry, vermiculite, sawdust or Fuller’s earth.
- Shovel absorbent waste material into proper waste containers
- Wash the contaminated areas thoroughly with hot, soapy water.
- Ventilate area to remove vapors.
- Report sizeable spills to proper environmental agencies.

In Case of Fire

Extinguishing Media: Dry chemical extinguishers such as mono ammonium phosphate, potassium sulfate, and potassium chloride. Additionally, carbon dioxide, high expansion (proteinic) chemical foam, or water spray for large fires.

DISCLAIMER

The data presented herein is not intended for use by nonprofessional applicators, or those persons who do not purchase or utilize this product in the normal course of their business. The potential user must perform any pertinent tests in order to determine the product’s performance and suitability in the intended application, since final determination of fitness of the product for any particular use is the responsibility of the buyer.

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