DESCRIPTION

DuPont™ Styrofoam™ Brand Extruded Polystyrene Pipe Insulation Billet (Styrofoam™) is a rigid thermoplastic foam manufactured by a proprietary extrusion process that forms a uniform, void-free, closed cell structure. This structure, along with the naturally water-repellent nature of the polystyrene resin, gives Styrofoam™ products high compressive strength, low friability and excellent resistance to water vapor and water absorption from freeze-thaw cycling. Styrofoam™ is non-dusting and non-irritating and is not a known food source for mold and mildew.

APPLICATIONS

Styrofoam™ is used extensively in industrial and commercial piping applications. With a service temperature range of -320°F to 165°F (-196°C to 74°C), Styrofoam™ is a preferred material for low-temperature systems, both for minimizing heat gain and preventing surface condensation.

Styrofoam™ maintains its key insulating properties in low-temperature applications and other environments with high humidity and high-moisture conditions.

Typical applications for Styrofoam™ include:

- Ammonia refrigeration lines
- Freezer rooms
- Chilled water piping
- Transport pipelines
- Cold storage systems
- Refrigeration equipment
- Pharmaceutical plants
- Cryogenic systems

SIZE

Styrofoam™ is extruded into billets. Height and width:

- 7" x 14" (18 cm x 36 cm)
- 8" x 16" (20 cm x 41 cm)
- 10" x 20" (25 cm x 51 cm)

Length: 9’ (2.75 m)

AVAILABILITY

Styrofoam™ insulation is distributed through JM’s extensive Authorized Fabricator Network

INSTALLATION

Styrofoam™is specifically formulated for easy fabrication into many shapes, such as pipe coverings, valve and fitting covers, and others to meet specific design needs. Because of the critical design aspects in many applications, JM recommends contacting qualified designers for system design.
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>Density, ASTM D1622</td>
<td>1.6 lb/ft^3 (26 kg/m^3)</td>
</tr>
<tr>
<td>Compressive Strength, ASTM D1621</td>
<td>20 lb/in^2 (138 kPa) parallel to rise</td>
</tr>
<tr>
<td>k-Factor, ASTM C518, @75°F (24°C) mean temp, Aged 180 Days</td>
<td>0.259 Btu•in/hr•ft•°F</td>
</tr>
<tr>
<td></td>
<td>0.037 W/m°C</td>
</tr>
<tr>
<td>Water Absorption, ASTM C272</td>
<td>1.0% by vol.</td>
</tr>
<tr>
<td>Water Vapor Permeability, ASTM E96</td>
<td>2.0 perms/inch</td>
</tr>
<tr>
<td>Dimensional Stability, ASTM D2126 (%Change)</td>
<td>1.0 @ 158° F (70°C), 97% R.H. 7 days</td>
</tr>
<tr>
<td>Service Temperature, ASTM D2126 (%Change)</td>
<td>-320°F to 165°F (-196°C to 73.9°C)</td>
</tr>
<tr>
<td>Color</td>
<td>Blue</td>
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</tbody>
</table>

(1) Unless otherwise indicated, data shown are typical values obtained from representative production samples. This data may be used as a guide for design purposes but should not be construed as specifications. For property ranges and specifications, consult your JM representative.

(2) Thermal conductivity data as provided by the manufacturer (DuPont) meeting a requirement of 0.259 Btu/in/hr/ft/F is reflective only of product aged in billet form and tested at 1” thickness, and therefore this data does not claim conformance under ASTM C578 Type XIII for thermal conductivity as aged in 1” thicknesses.

(3) Average value through foam cross section.

(4) Styrofoam™ can be used at this temperature and below but for applications below -29°F certain system design precautions may be necessary. Please consult JM for more information.

Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The physical and chemical properties of the product listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the Regional Sales Office nearest you for current information.

All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville thermal insulation and systems, visit www.jm.com/terms-conditions or call (800)654-3103.