

# **Poly Foam**

## Description

Poly Foam is a microcellular elastomeric polyurea hybrid system. This system may be applied by both low-pressure, air assisted machines or high pressure, plural component machines. The final color is grey. This system is a filler, flexible, sound deadening for waterproofing, sealing on concrete, geo textile, metal or wood.

#### **Preliminary Component Properties**

| ·   | Units                | Part B  | Part A      | Test Method           |  |
|---|----------------------|---------|-------------|-----------------------|--|
| Appearance  |                      | Black   | Pale-Yellow | Visual Density (23°C) |  |
|   | g/cm <sup>3</sup>    | 1.01    | 1.12        | ASTM                  |  |
|   |                      |         |             | D1475                 |  |
| Viscosity (23°C)  | cP                   | 600-900 | 500-1000    | ASTM                  |  |
|   |                      |         |             | D4287                 |  |
| Flash Point   | $^{\circ}\mathrm{C}$ | >100    | >150        | Closed Cup            |  |
| These are typical values and should not be construed as specifications. |                      |         |             |                       |  |

#### **Recommended Process Conditions**

The Polyol component must be mixed until homogenous before use. The material is processed with a two-component high pressure dosing machine using impingement mixing technology, a feed rate of 0.5 to 2 gallons/minute, and a round nozzle.

|  | Unit | Value       |  |
|--|------|-------------|--|
| Poly Foam, Part B                        | Vol  | 1.00        |  |
| Poly Foam, Part A                        | Vol  | 1.00        |  |
| Typical Component Pressures              | PSI  | 1,500-2,500 |  |
| Typical component Temperature            | °F   | 140-170     |  |
| (both components, tanks & hose the same) |      |             |  |

# **Typical Reaction Characteristics\***

|                | Unit | Valu |
|----------------|------|------|
| Gel Time       | S    | 7    |
| Take-free Time | S    | 16   |

<sup>\*-</sup>Values refer to test made with two-component, high pressure machine run according to the recommended process conditions above; Typical values and should not be construed as specifications.

# Handling and Storage

|                    | Units  | Part B | Part A |
|--------------------|--------|--------|--------|
| Storage Temp.      | °C     | 15-25  | 15-25  |
| Storage Stability/ | Months | 12     | 6      |
| Shelf life (1)     |        |        |        |

1. Both polyol and isocyanate components must be protected against humidity and stored in sealed containers.

# **Typical Polymer Properties**

|                     | Units     | Value | Test method |
|---------------------|-----------|-------|-------------|
| Hardness            | Shore     | 40-45 | ASTM D2240  |
| Tensile strength    | PSI       | 200   | ASTM D412   |
| 100% modulus        | PSI       | 145   | ASTM D412   |
| Elongation at break | %         | 1500  | ASTMC518-04 |
| Tear Resistance pli | 31        |       | ASTM D624C  |
| Insulation Value,   | $W/m^2$ - | .36   | ASTM D412   |
| K-factor            |           |       |             |
| Density             | lb./ft³   | 27    | DUB53479    |

These are typical values and should not be construed as specifications.

# Coverage:

80 sq. ft./gal @20 wet mils- 60 mils final expanded mils

#### Precautions

The use of this two-component system required special precautions. Please refer to the material safety data (MSD) sheet before using. Avoid inhalation of the vapor and contact with skin and eyes. Working areas should be well ventilated with fresh air.

Use protective gloves and goggles. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of contact with skin, wash immediately with plenty of water and soap. During spray application, wear suitable respiratory equipment.

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## **Safety Considerations**

Material Safety Data (MSD) sheets are available from Oak Ridge Foam & Coating Systems, Inc. MSD sheets are provided to help customers satisfy their own handling, safety and disposal needs and those that may be required by locally applicable health and safety regulations. MSD sheets are updated regularly, therefore, please request and review the most current MSD sheet before handling or using any product.

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