

## 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.

### 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	°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 (both components, tanks & hose the same)	°F	140-170

### Typical Reaction Characteristics\*

	Unit	Value
Gel Time	S	7
Take-free Time	S	16

\*-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/ Shelf life (1)	Months	12	6

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	%	150	ASTMC518-04
Tear Resistance pli	31		ASTM D624C
Insulation Value, K-factor	W/m <sup>2</sup> -	.36	ASTM D412
Density	lb./ft <sup>3</sup>	27	DUB53479

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

### Coverage:

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

### Product Stewardship

Oak Ridge Foam & Coating Systems, Inc has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our Product Stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our Product Stewardship program rests with each and every individual involved with Oak Ridge Foam & Coating Systems, Inc products — from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

### 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.

### Customer Notice

Oak Ridge Foam & Coating Systems, Inc. encourages its customers to review their application of Oak Ridge Foam & Coating Systems, Inc. products from the standpoint of human health and environmental quality. To help ensure that Oak Ridge Foam & Coating Systems, Inc. products are not used in ways for which they were not intended or tested, Oak Ridge Foam Inc. personnel will assist customers in dealing with ecological and products safety. 5/20