

#### Characterization

Bayseal open-cell (OC) is a spray-applied polyurethane foam (SPF) insulation.

### **Properties / Applications**

Bayseal open-cell (OC) spray-applied polyurethane foam insulation is produced with a two component, low density, non-structural insulation system designed for commercial, industrial and residential applications.

The system is comprised of an "A" component (aromatic diisocyanate) and a blended "B" component which includes polyols, fire retarding materials and catalysts.

As with any product, use of Bayseal OC foam-forming system must be tested (including, but not limited to, field testing) in advance by the user to determine suitability.

### **Storage Conditions**

Material should be stored from 50°F to 80°F (10°C to 27°C) in a dry and well-ventilated area. Storage outside this range can affect shelf life and material performance. Do not allow the material to freeze. The material will need to be conditioned to between 80°F and 100°F (27°C and 38°C) 48 hours prior to use. It takes approximately 48 hours in a heated area to condition all the material in a drum to the correct temperature.

Material temperature should be confirmed with a thermometer or an infrared gun. Do not recirculate or mix other suppliers '"B" component into Bayseal OC system containers.

CAUTION: If components are below suggested temperatures, the increased viscosity of the components may cause pump cavitation resulting in unacceptable SPF application.





## Typical Physical Properties\*

Properties*	Test Method	Value
Air Leakage Rate	ASTM E-283	<0.02L/s-m <sup>2</sup>
Water Vapor Permeance	ASTM E-96	21 perm-in
Density	ASTM D-1622	0.5 lbs/ft <sup>3</sup> (Nominal)
Aged R-value, 6 months <sup>a</sup>	ASTM C-518	3.7 at 1 inch
		13 at 3.5 inch
Compressive Strength	ASTM D-1621	>5 psi
Tensile Strength	ASTM D-1623	>3 psi
Viscosity @ 25°C (77°F)		100 - 120 cps
Dimentional Stability:	ASTM D-2126	
158°F @ 97% R.H		<15% Change in volume
Open Cell Content	ASTM D-2856	> 90%
Surface Burning Characteristics** Flame Spread	ASTM E-84	<25
Surface Burning Characteristics** Smoke Index	ASTM E-84	<450
Fungi Resistance	ASTM G-21	Zero Rating

<sup>\*</sup> These items are provided as general information only. They are approximate values and are not part of the product specifications.

## **Processing Parameters and Physical Characteristics**

Pre-Heater Temperature:	"A" and "B" 115° - 140°F
Hose Temperature:	"A" and "B" 115° - 140°F
Pressures:	1,000 - 1,600 psi (dynamic)*
Mix Ratio Parts:	1 to 1 volume "A" to "B"
Viscosity at 77°F	100 - 120 cps "B" Component
	150 - 250 cps "A" Component
Drum Temperature in Use	80° - 100°F
Shelf Life	6 months @ 50°F to 80°F
Or With Measuring Capabilities at Gun:	
Material temperature at gun	"A" and "B" 100° - 130°F
Pressure at gun (w/in 15'	>800 psi

<sup>\*</sup> Dependent upon hose length.



<sup>\*\*</sup> These numerical flame spread values are not a true reflection on how this or any material will perform in actual fire conditions.

a The higher the R-value, the greater the insulating power. Ask your seller for the fact sheet on R-values.



<b>Environmental Consideration and</b>
Substrate Temperatures

Applicators must recognize and anticipate climatic conditions prior to application. Ambient air and substrate temperature, moisture, and wind velocity are all critical determinants of foam quality. Variations in ambient air and substrate temperature will influence the chemical reaction of the two components, directly affecting the expansion rate, amount of rise, yield, adhesion and the resultant physical properties of the foam insulation.

All substrates to be sprayed must be free of dirt, soil, grease, oil and moisture prior to application. Moisture in the form of rain, fog or ice, will react chemically and will adversely affect system performance and corresponding physical properties.

If environmental temperature falls outside of the recommended processing parameters, it is the foam applicator's responsibility to ensure the system is being applied appropriately. Proper applications may require adjustments to one or more of the following: spray techniques, substrate, application, or job site temperature.

### **Per Lift Application**

Applicators should limit Bayseal OC foam thickness to 6 inches per lift for optimal processing and physical properties. It is the responsibility of the applicator to ensure SPF exotherm will not adversely affect substrates.

#### **Additional Technical Reference**

Construction Specification Institute Division 7 - Thermal and Moisture Protection

ICC-ES Evaluation Report ESR-1655

CCRR - 1049

Bayseal OC Spray Polyurethane Foam (SPF) Installation Guidelines

### **Health and Safety Information**

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling this product. Before working with this product, you must read and become familiar with the available information on its risks, proper use, and handling. This cannot be overemphasized. Information is available in several forms, e.g., safety data sheets and product labels. For further information contact your Accella Polyurethane Systems representative.

page 3 of 4

Document contains important information and must be read in its entirety.

Edition 04-01-2017 Replaces: 2016-07-08



**Product Datasheet** 











DISCLAIMER: To the best of our knowledge, all technical data contained herein is true and accurate as of the date of issuance and subject to change without prior notice. User must contact Bayseal to verify correctness before specifying or ordering. We guarantee our products to conform to the quality control standards established by Bayseal. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of the product. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY BAYSEAL EXPRESSED OR IMPLIED; STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE."

The information herein is to assist customers in determining whether our products are suitable for their applications. Customer assumes full responsibility for quality control, testing, and determination of suitability of product for its intended use or application. Accella warrants only that the material shall meet its specifications; this warranty is in lieu of all other written, expressed or implied warranties and Accella expressly disclaims any warranty of merchantability, fit these for a particular purpose, or freedom from patent infringement. Accordingly, buyer assumes all risks whatsoever as to the use of the material. Buyer's exclusive remedy as to any breach of warranty, negligence or other claim shall be limited to the purchase price of the material. Failure to adhere to any recommended procedures shall relieve Accella of all liability with respect to the material or the use thereof.

Accella Polyurethane Systems 2400 Spring Stuebner Rd Spring, TX 77377 United States Tel. 1-800-221-3626



page 4 of 4

Document contains important information and must be read in its entirety.

Edition 04-01-2017 Replaces: 2016-07-08