



TECHNICAL BULLETIN

Bayseal™ 2.0

Bayseal™ 2.0 is a non-ozone depleting spray polyurethane foam. Bayseal™ 2.0 is a reaction product of polymeric isocyanate “A-component” and resin “B-component” blown by Enovate® blowing agent and water. Bayseal™ 2.0 is a closed cell rigid foam with nominal 2.0 lb/ft³ density. Utilization of Enovate® as a blowing agent yields superior insulating properties over conventional insulating materials. Bayseal™ 2.0 is designed for construction of the air tight, energy efficient buildings. Typical yield per kit is 4000 – 4500 board feet (*individual results will vary*).

EQUIPMENT

Bayseal™ 2.0 is designed for use with a 1:1 by volume proportioning unit equipped with heaters to maintain recommended material temperatures. The spray gun should be set up for 12 – 20 pounds per minute throughput. Proper equipment and gun selection is critical to ensure optimal processing characteristics. Contact a BaySystems Technical representative for assistance in selecting proportioning units and guns.

PROCESSING TEMPERATURE AND HUMIDITY

Bayseal™ 2.0 may be applied between ambient temperatures of 35°F and 110°F and relative humidity less than 80%. DO NOT apply Bayseal™ 2.0 if ambient temperature is less than 5°F above dew point. See attached table to for dew point determination.

MACHINE PRESSURE AND TEMPERATURE RECOMMENDATIONS

A Preheater	110 - 130°F	A Pressure	800 - 1400 psi
B Preheater	110 - 130°F	B Pressure	800 - 1400 psi
Hose Temperature	110 - 130°F		

field conditions and equipment will dictate optimal temperature and pressure settings.

APPLICATION

Optimal application thickness is ½ to 2.0 inches. Lifts beyond 3 inches could result in excessive exotherm and possible scorching. Bayseal™ 2.0 is designed for interior use and NOT approved for exterior applications.

P. O. Box 1509, Spring, TX 77383 - 800-221-3626



BaySystems NorthAmerica

MATERIAL STORAGE

Bayseal™ 2.0 components MUST be stored between 50 – 80°F out of direct sunlight. The A Component is moisture sensitive. If material remains in a drum be sure to seal bungs tightly to minimize moisture exposure. BaySystems warrants all material for six months. Guaranteed not to have reactivity drift within this period (*material must be stored as recommended*).

DISPOSAL OF EMPTY DRUMS

Empty drums should be drip dry, and may be sent to a qualified drum re-conditioner, drum recycling facility, or a landfill permitted to accept used drums. Drums should not be torch cut to avoid generation of irritating and toxic gases and vapors from residual chemicals or cured product present in the drums.

SAFETY PRECAUTIONS

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling Bayseal™ 2.0 components. Before working with these products, you must read and become familiar with the available information on their hazards, proper use, and handling. This cannot be overemphasized. Information is available in several forms, e.g., material safety data sheets and product labels. Consult a BaySystems representative or contact Bayer's Product Safety and Regulatory Affairs Department in Pittsburgh, Pa.

Bayseal™ 2.0 must be separated from the interior of a building by an approved 15 minute thermal barrier. The thermal barrier may be omitted when Bayseal™ 2.0 is used in attics or crawlspaces where entry is restricted to service of utilities AND covered by a prescriptive ignition barrier as specified in IRC R315.5.3 – 4 (2006). Always consult your local building official or BaySystems Code representative for approved applications and restrictions.

SYSTEM SPECIFICATIONS

<u>Viscosity</u>	<u>cps @ 70° F</u>
A-Component	175 - 250
B-Component	600 - 800
<u>Mix Ratio</u>	<u>By Volume</u>
A-Component	100
B-Component	100

P. O. Box 1509, Spring, TX 77383 - 800-221-3626



Bayseal™ 2.0

TYPICAL PHYSICAL PROPERTIES *

DENSITY	ASTM D – 1622	Nominal 1.8 – 2.0 lbs / ft ³	
COMPRESSIVE STRENGTH	ASTM D – 1621	35 PSI	
TENSILE STRENGTH	ASTM D – 1623	80 PSI	
PERCENT CLOSED CELLS	ASTM D – 2856	≥ 90%	
INSULATION VALUES	ASTM C – 518	k Factor	R Value/Inch
		BTU-in/ft ² - ⁰ F-hr	ft ² - ⁰ F-hr/BTU-in
Aged 180 days		0.151	6.62
FUNGI RESISTANCE	ASTM G – 21	ZERO RATING	
AIR PERMEATION	ASTM E – 283 (at 75 Pa)	ZERO AIR LEAKAGE †	
DIMENSIONAL STABILITY	ASTM D – 2126	% Volume Change	
158 ⁰ F 100% Relative Humidity, 7 days		< 8	
200 ⁰ F, 7 days		< 11	
-20 ⁰ F, 7 days		< 1	
SURFACE BURNING CHARACTERISTICS ^Δ	ASTM E – 84 (Nominal 5 inches)	Class 1 ≤ 25 Flame Spread / ≤ 450 Smoke	
WATER VAPOR TRANSMISSION	ASTM E – 96 (Desiccant Method)	1.11 perm-inches	
SOUND TRANSMISSION CLASS	ASTM E – 90	Class 33	
VOC TESTING	CAN/ULC-S774	Pass	
SASKATCHEWAN RESEARCH COUNCIL			

* Typical data as obtained from laboratory samples and values may vary under actual field conditions.

† Bayseal™ 2.0 qualifies as an air barrier as defined by ICC.

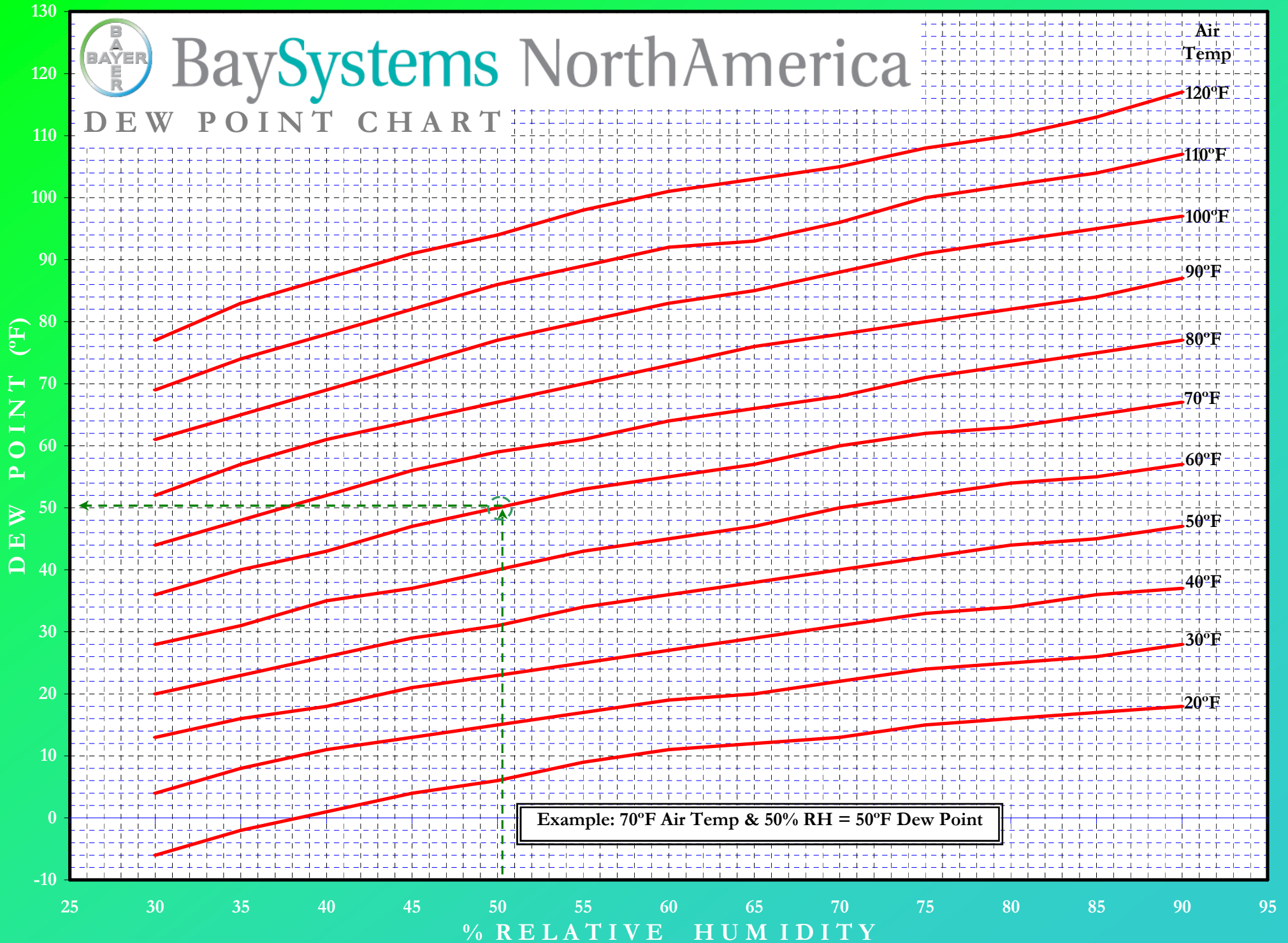
^Δ These flame-spread ratings are not intended to reflect hazards presented by this or any other material under actual fire conditions.

DISCLAIMER: Information contained herein is, true and accurate, but all recommendations or suggestions are made without guarantee. BaySystems North America LLC (BSNA) products are intended for sale to industrial and commercial customers. Since BSNA exercises no control over its customers appreciation or use of the product manufactured by BSNA and since materials used with the products may vary, it is understood that BSNA can warrant only that our products will meet our written specifications. Nothing herein shall constitute any warranty of merchantability or fitness, nor is protection from any law or patent to be inferred. All patent rights are reserved. BSNA requests that customers inspect and test our products before use, and satisfy themselves as to contents and suitability. The exclusive remedy for all proven claims is replacement of our materials and in no event shall BSNA be liable for any consequential, incidental, indirect, or special damages resulting in any manner from the furnishing of the material.



BaySystems North America

DEW POINT CHART



Example: 70°F Air Temp & 50% RH = 50°F Dew Point