



Foam & Coating Systems, Inc.

# OR 93BL (Flak Jacket) Bedliner

# Description

OR93BL (Flak Jacket) Bedliner is highly reactive two component polyurethane-urea hybrid based, solvent free membrane with excellent mechanical characteristics. The system exhibits combined excellent tensile strength, high elongation values, and good wear and tear propagation resistance. The membrane also provides lasting crack bridging properties.

Applied using specialist spray equipment, OR93BL will begin curing in seconds allowing vertical applications and rapid build up to the desired thickness. OR93BL retains a high degree of elasticity even at low temperatures.

#### **Typical Component Properties**

	Units	OR93BL,	OR93BL,	Test
		Part A	Part B	Method
Color		Yellow	Black	Visual
		Liquid	Liquid	
Viscosity	cPs	500-800 (at	400-800	Brookfield
		75°F)	(at 75°F)	
Specific	g/cc	1:14	1.04	
Gravity				

#### **Surface Preparation**

All surfaces should be prepared using standard industry practices. If there are any doubts about suitability, a small trial area should be applied.

#### **Mixing Instructions**

OR93BL is designed for use through specialist two component spray equipment. Our Technical Service Department can advise on choice of equipment and optimum processing conditions.

Both components should be raised to the processing temperature and agitated well before use to ensure an even color.

#### **Application Details**

Surfaces should be primed, if needed, with the correct primer. OR93BL is then applied evenly through the correct processing equipment using a 'sweeping' action ensuring a consistent even application is achieved. Overcoating of the membrane can take place after approximately 2 hours of application and up to a maximum of 48 hours.

If applying OR93BL and the first coat has been allowed to cure for more than 24 hours, then cleaning and re-priming is recommended to ensure adequate adhesion is achieved for the subsequent coat. OR93BL may be applied down to a temperature of 32°F providing the temperature is rising and at least 6°F above dew point. The membrane will accept light traffic after 2 hours.

#### **Typical Reaction Characteristics**

	Units	Results	Test
			Method
Gel Time	Seconds	6-8	Sprayed
Tack Free Time	Seconds	10-12	Sprayed
Full-Service use	Hours	2	

Values refer to test made with a two-component; high-pressure machine run according to the recommended process conditions above. 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 should be processed through a two-component high-pressure dosing machine using impingement mixing technology at a feed rate of 0.5 to 2 gallons/minute through a round nozzle.

	Units	Limits
OR93BL, Part B	Vol	1
OR93BL, Part A	Vol	1
Solids Content	%	100
Typical Component Temperature <sup>(1)</sup> (both components, tanks and hose the same)	°C(°F)	55-75 (130-170)
Theoretical Coverage	Ft <sup>2</sup>	4100ft <sup>2</sup> /950lb kit @ 40 mils, 2050ft <sup>2</sup> /950lb kit @ 80 mils
Typical component pressures <sup>(1)</sup>	Psi	1800-2500

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

#### Handling and Storage

	Units	OR93BL, Part B	OR93BL, Part A
Storage temperature	°F (°C)	59-77 (15-25)	59-77 (15-25)
Storage stability/ Shelf life <sup>(1)</sup>	Months	6	6

1.Stored in the original sealed drums in a dry place at the recommended temperature

# **Typical Polymer Properties**

	Units	Limits	Test
			Method
Hardness	Shore D	50	ASTM
			D2240
Density	g/cc	1.01	DIN 53479
Percent	%	100 (0 g/l	
Solids		VOCs)	
Tensile	Psi	5630	ASTM
			D412
Elongation	%	140	ASTM
			D412
Tear	pli	340	ASTM
			D624C
Taber	mg/rev. loss	95/1000	ASTM
Abrasion			D3389
		1	

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#### **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 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

Safety Data Sheets (SDS) are available from Oak Ridge Foam & Coating Systems, Inc. SDS 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. SDS are updated regularly, therefore, please request and review the most current SDS before handling or using any product.

#### **Customer Notice**

Oak Ridge Foam & Coating Systems, Inc strongly encourages its customers to review both their manufacturing processes and their applications of Oak Ridge products from the standpoint of human health and environmental quality to ensure that Oak Ridge

products are not used in ways for which they are not intended or tested, Oak Ridge personnel are available to answer your questions and to provide reasonable technical support. Oak Ridge product literature including safety data sheets, should be consulted prior to use.

# Disclaimer

The technical data and any other printed information furnished by Oak Ridge Foam & Coating Systems, Inc. (ORFC) are true and accurate to the best of our knowledge. ORFC products conform to in housed quality control procedures, tested and should be considered free of defects. The data provided is believed to be reliable and is offered solely for evaluation. The use of the product is beyond the control of the seller; therefore, the buyer assumes all risk whatsoever as to the use of these materials and handling whether done in a matter that is in accordance with the provided posted directions or not. Failure to strictly adhere to recommended procedures and attend a one-day Certified Applicator training, held at the corporate facility located in Green Lake, WI for proper application of ORFC products and materials, shall relieve ORFC of all liability with respect to the materials or the use thereof. This buyer sole and exclusive remedy. All claims concerning product defects must be made in writing within (6) six months of shipment. The absence of such claims in writing during this period will constitute a wave of all claims with respect to such product. This warranty shall be in lieu of any other warranty, expressed, or implied, including, but not limited to any warranty of merchantability or fitness for a particular purpose. 12/20