

OR 80WPM

Description

OR 80WPM is highly reactive two component polyurethane-polyurea based hybrid spray elastomer, 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, OR 80WPM will begin curing in seconds allowing vertical applications and rapid build up to the desired thickness OR 80WPM retains a high degree of elasticity even at low temperatures.

Typical Component Properties

	Units	Part A	Part B	Test Method
Color		Yellow	Off white	Visual
Viscosity	cPs	300-700 (at 75°F) (24°C)	200-600 (at 75°F) (24°C)	Brookfield
Specific Gravity	g/cc	1.14	1.014	

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

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

OR 80WPM 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. OR 80WPM is then applied evenly through the correct processing equipment using a 'sweeping' action ensuring a consistent even application is achieved. Over-coating of the membrane can take place after approximately two hours of application and up to a maximum of 48 hours.

If applying OR 80WPM onto OR 80WPM, 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. OR 80WPM 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 two hours.

Handling and Storage

	Units	Part B	Part A
Storage temperature	°F (°C)	59-77 (15-25)	59-77 (15-25)
Storage stability/ Shelf Life	(3) Months	12	6

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

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
Part B	Vol.	1
Part A	Vol.	1
Solids Content	%	100
Typical component temperature (1) (both components, tanks and hose the same).	°C (°F)	55-75 (130-170)
Typical component pressures (1)	Psi	1800-2500
Theoretical Coverage		80 Sq. Ft. per gal @ 20 mils

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

Typical Reaction Characteristics (2)

	Units	Result	Test Method
Gel Time	Seconds	6-8	Sprayed
Tack Free Time	Seconds	12-15	Sprayed
Full-Service Use	Hours	2	

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.

Typical Polymer Properties

	Units	Limits	Test Method
Hardness	Shore D	50	ASTM- D2240
Density	g/cc	1.01	DIN 53479
Percent Solids Method	%	100	In-house Internal
		(0 g/l VOCs)	
Tensile	psi	2185	ASTM- D412
Elongation	%	611	ASTM - D412
Tear	pli	345	ASTM- D624C
Taber Abrasion	Mg/rev. loss	103/1000	ASTM- D3389

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

Product Stewardship

Oak Ridge Foam & Coating Systems, Inc and 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 products — from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Safety Considerations

The use of this two-component system requires 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.

Safety Data Sheets (SDS) are available from The Oak Ridge Chemical Company. 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 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 of Oak Ridge products.

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