

# OR90CL

## Containment Lining

### Description

OR90CL is a two-component polyurethane-urea hybrid spray elastomer system based on methylene diphenylenediisocyanate designed for industrial applications. Materials are applied via high pressure direct impingement mixing onto concrete, steel or other substrates and allowed to cure in place, forming the finished coating. The component chemistry allows sprayed material to be applied at high thickness (1/2 inch or greater can be achieved), and the high reactivity of the components allows application in a wide range of temperature and humidity.

### Typical Component Properties

	Units	OR90CL Part B Polyol	OR90CL Part A Isocyanate	Test Method
Appearance		Black Liquid	Yellow Liquid	DOWM 101967
Viscosity @ 23°C	mPas	400-800	500-800	ASTM D4287
Density 20°C	g/cm <sup>3</sup>	1.04	1.14	ASTM D1475
Flash Point	°F	>200	>200	Closed Cup

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

### Recommended Process Conditions

The Polyol component must be mixed until homogeneous before use. The material is processed with a two-component high pressure dosing machine using impingement mixing technology.

	Units	Limits
OR90CL Part B Polyol	Pbv	1.00
OR90CL Part A Isocyanate	Pbv	1.00
Typical Metering Equipment		PMC/PHX-40, Graco (other heated two-component proportioning unit also suitable)
Typical Spray Gun		AP-2, Probler
Typical Component Temperature	°C (°F)	60-70 (140-160) Both components, tanks and hose the same
Typical Component Pressures	Psi	2000-2400

### Typical Reaction Characteristics

	Units	Value
Gel Time	S	3-6
Tack free time	S	5-10 days
Final hardness	Days	7

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

### Handling and Storage

	Units	OR90CL Part B Polyol	OR90CL Part A Isocyanate
Storage temperature	°C	15-25	15-25
Storage stability/Shelf life	Months	6	6

1. Isocyanate must be protected against humidity and must be stored in unopened drums

## Typical Polymer Properties

	Units	Value	Test Method
Hardness	Shore A/D	48D	ASTM D2240
Tensile Strength	Psi	2700	ASTM D412
Elongation at Break	%	160	ASTM D412
Tear Resistance	Pli	340	ASTM D624C
Taber Abrasion	Mg loss	100	ASTM D3389, H18 wheel, 1000 g load, 1000 rev.
Density	g/cm <sup>3</sup>	1.0	DIN 53479

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## Product Stewardship

Oak Ridge Foam & Coating Systems, Inc. and its subsidiaries 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

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. These are available from the nearest Oak Ridge Foam & Coating Systems, Inc. sales office.

## Customer Notice

Oak Ridge Foam & Coating Systems, Inc. strongly encourages its customers to review both their manufacturing processes and their applications of Oak Ridge Foam & Coating Systems, Inc. products from the standpoint of human health and environmental quality to ensure that Oak Ridge Foam & Coating Systems, Inc. products are not used in ways for which they are not intended or tested, Oak Ridge Foam & Coating Systems, Inc. personnel are available to answer your questions and to provide reasonable technical support. Oak Ridge Foam & Coating Systems, Inc. product literature, including safety data sheets, should be consulted prior to use of Oak Ridge Foam & Coating Systems, Inc. products. Current safety data sheets are available from Oak Ridge Foam & Coating Systems, Inc.

