



POLYTEK® DEVELOPMENT CORP.
BCC PRODUCTS, INC.

Product Technical Datasheet BC-8990 Urethane Elastomer

BC-8990 is a two-component urethane elastomer compound specifically designed for general purpose molding and casting of various shapes. This product is a safe, easy-to-handle, room temperature mixing and curing system that contains no TDI, MDA or MOCA. BC-8990 may be used to provide abrasion resistant liners, pads and bumpers. The low shrinkage, low viscosity, superior toughness, and excellent detail reproduction of makes this system ideal for general purpose castings and quality tooling operations. It may also be used in potting and encapsulating applications.

Product Highlights

- Excellent for molds for casting of concrete and plaster
- Resists oil and moisture absorption
- Room temperature cure
- High tear strength and toughness
- Hardness/durability comparable to high grade vulcanized rubber

Product Uses

- Mold Fabrication
- Shock absorbent pads & liners
- Adhesive for high strength and resilient bonds
- Many types of urethane rubber parts

Working Properties

Mix Ratio:	
Resin Part A	4 parts by weight
Curative Part B	1 part by weight
Viscosity, Centipoise (cps) @ 75EF (ASTM D-2393)	
Part A	6,000
Part B	50
Initial Mixed Viscosity	3,600
Gel Time @ 75EF (ASTM D-2471)	25 minutes
Demold Time @ 75EF	16 - 24 hours
Complete Cure @ 75EF	3-5 days

2140 Earlywood Drive, P.O. Box 327, Franklin, IN 46131
Ph (317) 736-4090 Fax (317) 736-4872
Web: www.bccproducts.com & www.polytek.com

1/16/2020

Physical Properties

Hardness, Shore A (ASTM D-2240)	82 - 85
Tensile Modulus @ 100%, psi (ASTM D-412)	550
Tensile Strength, psi (ASTM D-412)	1,750
Tensile Elongation, % (ASTM D-412)	720
Tear Strength, pli (ASTM D-624 Die C)	175
Density, Cured, g/cm ³ (lbs.in. ³) (ASTM D-792)	1.03

Mold Preparation and Mold Release

When BC-8990 is used with plaster models, wood models, or other porous substrates, it is recommended that the substrate surfaces first be sealed. Release agents such as BC87 Urethane Parting Wax (yellow) or BC84 PVA Parting (green) may then be applied over the sealed surface.

Storage and Safety

Store in a dry, cool place. Unopened containers of BC-8990 have a shelf life of 6 months when stored inside under normal conditions (75EF \pm 15EF). In order to prevent moisture contamination, once containers have been opened, they should be purged with dry nitrogen prior to replacing lids or caps. This material should be used in a well ventilated area. Avoid contact with skin using protective gloves as well as protective clothing. Always use approved safety glasses or goggles when handling this product. Note: Before using this product, please refer to the Material Safety Data Sheet

DISCLAIMER: The information in this bulletin and otherwise provided by Polytek® Development Corp. is considered accurate. However, no warranty is expressed or implied regarding the accuracy of the data, the results to be obtained by the use thereof, or that any such use will not infringe any patent. Before using, the user shall determine the suitability of the product for the intended use and user assumes all risk and liability whatsoever in connection therewith.