



BCC PRODUCTS, INC.

BLEHM PLASTICS

FAST CAST – EPOXIES – ADHESIVES - POLYSULFIDES - URETHANES – POLYESTER PASTES – TOOLING BOARDS – RELEASE AGENTS – SILICONES

PROTO-KAST

(WHITE)

BC8163

Urethane

BC 8163 is a very low viscosity, rapid setting, rigid urethane compound. This system will cure quickly to a hard, tough, impact resistant casting. **BC 8163** is non-sensitive to moisture after cure and will readily bond to itself if stage pours are required. The one-to-one volume mix ratio makes the system readily adaptable for machine mixing and dispensing. **BC 8163** is recommended in applications where a "thermoplastic feel" is desired.

Working Properties

Mix Ratio (Part A/Part B)	100 to 96 by wt. 100 to 100 by vol.
Viscosity (Brookfield @ 77°F)	Part A: 50 cps Part B: 100-150 cps
Color	Part A: Light Amber Part B: Clear
Pot Life (1 lb. mass) @ 77°F	2 min-2 1/2 mins.
Demold Time, 77°F (25°C)	20-60 minutes*
Final Cure, 77°F (25°C)	7 Days

*Although BC 8163 cures to a demoldable hardness in about 20 minutes, the casting may exhibit brittleness. If less than one hour demold is necessary, use extreme care. BC 8163 exhibits increasing toughness during cure with a one hour room temperature cure recommended.

Physical Properties

Specific Gravity (ASTM D792), Cured	1.07 gms/cc
Cubic Inches per Pound	25.2
Hardness (Shore D) @ 77°F	78±5
Linear Shrinkage (ASTM D2566)	.0029 in./in.
Ultimate Tensile Strength (ASTM D638)	5,600 psi
Ultimate Flexural Strength (ASTM D790)	7,875 psi
Ultimate Compressive (ASTM D695)	3,985 psi
Elongation % (ASTM D638)	3.5
Flexural Modulus (ASTM 790)	2.2 x 10 ⁶
Deflection Temperature (ASTM D648)	135°F
Impact Strength (ASTM D256) Izod Notched	1.5 ft. lbs./in.
Thermal Coefficient of Expansion (ASTM 696) in./in./°F	13.2 x 10 ⁻⁵

*Results obtained from a 7 day room temperature cure.

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