

# **BCC PRODUCTS, INC.**



**BLEHM PLASTICS** 

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

# **URETHANE ELASTOMER**

(Ultra Clear) **BC8782**Urethane

**BC 8782** produces a high impact rigid 82 Shore D material that is commonly used to make clear or tinted castings of all kinds. When used at room temperature castings 1/8" thick or larger can be readily cast. Castings that are less than 1/8" thick generally require a mild post-cure. This system is <u>not</u> recommended for use with tin cure silicones.

### **Handling Properties**

Mix Ratio (By weight)

Resin Part A 100 parts by Weight Curative Part B 85 parts by Weight

Mix Ratio (By Volume)

Resin Part A 100 parts by Volume Curative Part B 88 parts by Volume

Viscosity, Centipoise (cps) @ 77°F (Ratio by Volume)

Viscosity, Part A 600 Viscosity, Part B 550 Mixed Viscosity 650

Color

Resin Part A Clear/Colorless
Curative Part B Clear/Colorless
Work Life @ 75°F (mass dependent) 12-14 minutes
Demold Time @ 75°F 6-8 hours
Cure Schedule:

5-7 days at RT, or 16 hours at 150-180°F. See heat cure below. Product is sufficiently cured after one day, ambient, for general handling.

#### **Cured Properties**

Hardness Shore D, ASTM D 2240-68 82 Specific Gravity (gm/cc) Density 1.04 Cu. in. per pound 26.7

Color Water Clear/Colorless

 Tensile Strength (psi) ASTM 638-82
 4,700

 Elongation (%) ASTM D 638-82
 7-10

 Shrinkage (in./in.) ASTM D 2566-79
 .0003

 Tensile Modulus, 5% strain, ASTM D-790
 >90,000

 Heat Deflection Temp. °F (66 psi load)
 165

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BC 8782

PAGE -2-

### **Heat Curing**

Generally, for most applications, ambient temperature curing is adequate; however, maximum physical properties and heat resistance is obtained by post curing for 16 hours at 150°-180°f, or 6-8 hours at 180°-210°F. Parts may require some support during heat cure. A suggested cure schedule is: 3-5 days at room temperature (to minimize any softening during heating), followed by 4-6 hours at 130°-150°F, and an additional 16 hours at 160°-180°F. This cure schedule minimizes part distortion and shrinkage, while affording maximum toughness and heat sag resistance.

### **Product Uses**

Prototype computer parts.

Models of all kinds.

Artwork components.

Architectural models.

Gears, wheels, fans.

Transportation cases.

Miniatures and movie props.

# **Product Highlights**

Exceptional clarity.

Very high impact rigid material.

12-14 minute working time provides the option for large pours.

No odor.

Cures in most silicone rubber molds.

Good weatherability, non-yellowing.

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