



RIGID FILLED & UNFILLED URETHANES

"Dedicated to QUALITY, SERVICE, SAFETY, and INNOVATION"

**TC-808 A/B
78 SHORE D URETHANE CASTING SYSTEM
WHITE**

PRODUCT DESCRIPTION:

TC-808 A/B is a low viscosity, rapid setting, and rigid urethane compound. This system will cure quickly to a hard, tough casting. TC-808 A/B is generally insensitive to moisture during and after cure and will readily bond to itself if stage pours are required. TC-808 A/B is recommended in applications where a "thermoplastic feel" is desired.

PHYSICAL PROPERTIES:

Hardness, Shore D ASTM D2240	78 ± 2
Density, (g/cc) ASTM D792	1.08
Cubic Inches per Pound	25.7
Color/Appearance.....	White/Opaque
Tensile Strength, (psi) ASTM D638.....	6,000
Tensile Modulus, (psi) ASTM D638	1.9 x 10 ⁵
Elongation, (%), ASTM D638	7.0
Flexural Strength, (psi) ASTM D790	6,225
Flexural Modulus, (psi) ASTM D790	1.7 x 10 ⁵
Shrinkage, (in/in) linear (12" x 1/2" x 1/2")	0.004
Izod Impact, (ft lb/in) ASTM D256.....	0.52
Heat Deflection Temperature, @ 66 (psi) ASTM D648	170°F (77°C)
Dielectric Constant, @ 1 MHz ASTM D150	3.447
Dissipation Factor, @ 1 MHz ASTM D150.....	0.0176
Ball Pressure Test, (mm) 167°F (75°C) IEC 60695-10-2	1.7

HANDLING PROPERTIES:

Mix Ratio (by weight):	
Part A	100 parts by weight
Part B	100 parts by weight
Mix Ratio (by volume):	
Part A	90 parts by volume
Part B	100 parts by volume
Specific Gravity:	
Part A	1.14
Part B	1.02
Viscosity, (cps) @ 77°F (25°C) Brookfield:	
Part A	90
Part B	300
Mixed	200

HANDLING PROPERTIES (continued):

Color:

Part A Pale yellow
Part B White

Work Time, 100g mass @ 77°F (25°C) 2 - 2 1/4 minutes

Demold Time @ 77°F (25°C)..... 30-60 minutes (see Note 1)

CURE SCHEDULE/HEAT CURING:

Most of the physical properties can be achieved in 5-7 days at ambient temperature, 77°F (25°C). In order to achieve maximum physical properties, a post cure with heat is required. BJB recommends 24 hours at ambient temperature, 77°F (25°C), followed by 16 hours at 180°F (82°C). Support of the part may be required to prevent part deformation during the heat curing process.

NOTE 1:

TC-808 A/B generally cures to a demoldable state in about 30 minutes; however, thin sections or certain part configurations may require more in-mold cure time. TC-808 A/B gains increasing toughness early in the cure cycle and thick sections, (3/8" or greater), may be demolded much sooner. Sections that are less than an 1/8" may require an hour or more before demold.

NOTE 2:

The "B" side should be remixed before each use until uniform in appearance. Opened containers of material should be purged with dry nitrogen prior to replacing lids or caps to prevent moisture contamination from humid air.

STORAGE:

Store in a cool dry place. Unopened containers will have a shelf life of 6 months from date of shipment when properly stored at room temperatures. Purge opened containers with dry nitrogen before re-sealing.

PACKAGING:

1 Gallon kits..... 8 lbs. A, 8 lbs. B
5 Gallon kits..... 40 lbs. A, 40 lbs. B
55 Gallon kits 400 lbs. A, 400 lbs. B

SAFETY PRECAUTIONS:

Use in a well-ventilated area. Avoid contact with skin using protective gloves and protective clothing. Repeated or prolonged contact on the skin may cause an allergic reaction. Eye protection is extremely important. Always use approved safety glasses or goggles when handling this product.

IF CONTACT OCCURS:

Skin: Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. It is *not* recommended to remove resin from skin with solvents. Solvents only increase contact and dry skin. Seek qualified medical attention if allergic reactions occur.

Eyes: Immediately flush with water for at least 15 minutes. Call a physician.

Ingestion: If swallowed, call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel. Never give anything by mouth to an unconscious person.

Refer to the Material Safety Data Sheet before using this product.