



# TC-802 A/B

## 73 SHORE D POLYURETHANE CASTING SYSTEM

### WHITE

**PRODUCT DESCRIPTION:**

TC-802 A/B is an easy to use rigid urethane casting material. TC-802 A/B is an extremely low viscosity system with quick demold times. This system also exhibits good physical and heat capabilities. In addition, this system is economically priced. The one-to-one volume ratio makes it perfect for use with dispensing equipment. TC-802 A/B is a great product when ABS-type parts with a quick turnaround are required. Features a non-mercury based catalyst system.

**PHYSICAL PROPERTIES:**

Hardness, Shore D ASTM D2240-04e1 .....	73 ± 2
Density, (g/cc) ASTM D792-00 .....	1.06
Color/Appearance.....	White/Opaque
Cubic Inches per Pound .....	26.5
Tensile Strength, (psi) ASTM D638-03 .....	4,180
Tensile Modulus, (psi) ASTM D638-03.....	1.32 x 10 <sup>5</sup>
Elongation, (%) ASTM D638-03.....	40
Flexural Strength, (psi) ASTM D790-03.....	5,975
Flexural Modulus, ASTM D790-03 .....	1.48 x 10 <sup>5</sup>
Shrinkage, (in/in) linear 12" x 1/2" x 1/2" .....	0.006
Izod Impact, (ft-lb/in) notched ASTM D256-05 .....	0.42
Heat Deflection Temperature ASTM D648-04:	
@ 66 psi.....	177°F (81°C)
@ 264 psi.....	147°F (64°C)

Note: Reported physical properties based on elevated temperature cured test specimens.

**HANDLING PROPERTIES:**

Mix Ratio (by weight):

Part A .....	100 parts by weight
Part B .....	90 parts by weight

Mix Ratio (by volume):

Part A .....	100 parts by volume
Part B .....	100 parts by volume

Specific Gravity:

Part A .....	1.10
Part B .....	0.99

**HANDLING PROPERTIES (continued):**

Viscosity, (cps) @ 77°F (25°C) Brookfield:

Part A .....	40
Part B .....	120
Mixed .....	80

Color:

Part A .....	Pale yellow
Part B .....	Colorless

Work Time, (100-gram mass) @ 77°F (25°C)..... 100 seconds  
Demold Time @ 77°F (25°C)..... 10 minutes

**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.

**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 temperature. Purge opened containers with dry nitrogen before re-sealing.

**PACKAGING:**

Gallon kits.....	8 lbs. A, 7.2 lbs. B
5 Gallon kits.....	40 lbs. A, 36 lbs. B
Drum kits .....	400 lbs. A, 360 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.**

NON-WARRANTY "Except for a warranty that materials substantially comply with the data presented in Manufacturer's latest bulletin describing the product (the basis for this substantial compliance is to be determined by the standard quality control tests generally performed by Manufacturer), all materials are sold "AS IS" and without any warranty express or implied as to merchantability, fitness for a particular purpose, patent, trademark or copyright infringement, or as to any other matter. In no event shall Manufacturer's liability for damages exceed Manufacturer's sale price of the particular quantity with respect to which damages are claimed."

