

## TC-800 A/B

### 75 SHORE D POLYURETHANE CASTING SYSTEM



**PRODUCT DESCRIPTION:**

TC-800 A/B is an easy to use rigid urethane casting material. TC-800 A/B exhibits excellent physical properties, very low viscosity, high heat capability and quick demold times. In addition, this system is economically priced. The one-to-one volume ratio makes it perfect for use with dispensing equipment. TC-800 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	TEST METHOD	TEST RESULTS
Hardness, Shore D	ASTM D2240-04	75±2
Density (g/cc)	ASTM D792	1.11
Cubic Inches per Pound	N/A	25.7
Color/Appearance	Visual	White/Opaque
Tensile Strength (psi)	ASTM D638	6,100
Tensile Modulus (psi)	ASTM D638	1.9 x 10 <sup>5</sup>
Elongation (%)	ASTM D638	8
Flexural Strength (psi)	ASTM D790	9,250
Flexural Modulus (psi)	ASTM D790	2.3 x 10 <sup>5</sup>
Shrinkage (in/in) linear	12"x ½" x ½"	0.007
Izod Impact, notched (ft-lb/in)	ASTM D256	0.5
Heat Deflection Temperature @ 66psi	ASTM D648	185 ± 5°F (85 ± 3°C)
Heat Deflection Temperature @ 264psi	ASTM D648	160 ± 5°F (71 ± 3°C)

HANDLING PROPERTIES	Part A	Part B
Mix Ratio (by weight)	100	88
Mix Ratio (by volume)	100	100
Specific Gravity	1.15	1.01
Color	Pale Yellow	Colorless
Viscosity (cps) @77°F (25°C) Brookfield	60	375
Mixed Viscosity (cps) @77°F (25°C) Brookfield	200	
Work Time, 100g mass @ 77°F (25°C)	2 minutes	
Demold Time @ 77°F (25°C)	60 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 150-180°F (66-82°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.

<b>PACKAGING</b>	<b>Part A</b>	<b>Part B</b>
Gallon kits	8 lbs.	7.1 lbs.
5 Gallon kits	40 lbs.	35.2 lbs.
Drum kits	400 lbs.	352 lbs.

**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.**