

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



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	TEST METHOD	RESULTS
Hardness, Shore D	ASTM D2240	78 ± 2
Density (g/cc)	ASTM D792	1.08
Cubic Inches per Pound	N/A	25.7
Color/Appearance	Visual	White/Opaque
Tensile Strength (psi)	ASTM D638	6,000
Tensile Modulus (psi)	ASTM D638	190,000
Elongation (%)	ASTM D638	7
Flexural Strength (psi)	ASTM D790	6,225
Flexural Modulus (psi)	ASTM D790	170,000
Shrinkage (in/in) linear	12"x1/2"x1/2"	0.004
Izod Impact, notched (ft-lb/in)	ASTM D256	0.52
Heat Deflection Temperature, 66 psi	ASTM D648-04	170°F (76.7°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	Part A	Part B
Mix Ratio by weight	100	100
Mix Ratio by volume	90	100
Specific Gravity @ 77°F (25°C)	1.14	1.02
Color	Pale Yellow	White
Viscosity (cps) @ 77°F (25°C) Brookfield	90	300
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	200	
Work Time, 100g mass @ 77°F (25°C)	2 – 2.25 minutes	
Demold Time @ 77°F (25°C)	30 – 60 minutes (see Note 1)	

Properties above are typical and not for specifications.

## **CURE SCHEDULE/HEAT CURING:**

Most of the physical properties can be achieved in 5-7 days at 77°F (25°C). You may use your own post-cure schedule but the physical properties may vary from BJB's cure schedule of 1-3 hours at 77°F (25°C) followed by 16 hours at 180 °F (82°C). Do not exceed curing temperatures of 200°F (93°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 a 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 at ambient temperatures, 65-80°F (18-27°C). Unopened containers will have a shelf life of 6 months from date of shipment when properly stored at recommended temperatures. Purge opened containers with dry nitrogen before re-sealing.

<b>PACKAGING</b>	<b>Part A</b>	<b>Part B</b>	<b>Cubic Inches per Kit</b>
Gallon Kits	8 lbs.	8 lbs.	411.2
5-Gallon Kits	40 lbs.	40 lbs.	2,056
55-Gallon Drum Kits	400 lbs.	400 lbs.	20,560

## **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.**



Handling Guide



TC-808 Part A SDS



TC-808 Part B SDS