



# TC-440 A/B

## 40 SHORE A POLYURETHANE ELASTOMER

### PRODUCT HIGHLIGHTS:

TC-440 A/B is a multi-purpose elastomer system that can perform many functions. Product characteristics are:

- ✓ Cures at room temperature to produce a strong, resilient elastomer
- ✓ Easy to use
- ✓ Exudate and volatile free

### PHYSICAL PROPERTIES:

Hardness, Shore A, ASTM D2240-04e1 .....	40 ± 5
Density, (g/cc) ASTM D792-00 .....	1.04
Cubic Inches per Pound .....	25.8
Color/Appearance.....	Pale yellow/Translucent
Tensile Strength, (psi) ASTM D412-98a(2002)e1 .....	>612*
Tensile Modulus, (psi) ASTM D412-98a(2002)e1 .....	92
Elongation, (%) ASTM D412-98a(2002)e1 .....	>1,700*
Tear strength, (pli) ASTM D624-00e1 Die C.....	162
Shrinkage, (in/in) linear ASTM D2566-.....	0.003

\*Note - Test specimens exceed travel distance of testing equipment.

### HANDLING PROPERTIES:

Mix Ratio (by weight):

Part A .....	100 parts by weight
Part B .....	75 parts by weight

Mix Ratio (by volume):

Part A .....	100 parts by volume
Part B .....	78 parts by volume

Specific Gravity:

Part A .....	1.05
Part B .....	1.01

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

Part A .....	3,920
Part B .....	890
Mixed.....	3,440

Color:

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

**HANDLING PROPERTIES (continued):**

Work Time, 100g mass @ 77°F (25°C) .....	25 minutes
Gel Time .....	50 minutes
Demold Time @ 77°F (25°C).....	6-8 hours

**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 160°F (71°C).

**MOLD PREPARATION AND RELEASING:**

When TC-440 A/B is used to reproduce molds from plaster, wood or other porous substrates, we would first recommend that they be sealed. Release agents may then be applied over the sealed surface.

**NOTE:**

Air exposed surfaces may have some tackiness when cured at room temperature. A mild post cure or covering the back of open molds will eliminate any residual tackiness. **The cure will be inhibited if cast against a tin catalyzed silicone RTV.** Prolonged direct exposure to sunlight can affect the surface of this product. Cover molds or other products when storing outdoors.

**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, 6 lbs. B
5 Gallon kits.....	40 lbs. A, 30 lbs. B
55-Gallon drum kits.....	400 lbs. A, 300 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.**