



## **TC-9460 A/B**

### **CASTABLE HIGH PERFORMANCE 60 SHORE D POLYURETHANE ELASTOMER**

#### **PRODUCT DESCRIPTION:**

TC-9460 A/B is a two-component urethane casting compound that is specifically formulated for high abrasion and impact resistance. It is recommended for use in the casting of highly wear-resistant parts and linings. This product is a safe, easy-to-handle, room temperature mixing and curing system that does not contain TDI, MDI, MDA, or MOCA. TC-9460 A/B is relatively insensitive to typical environmental moisture and will make good void-free parts. Because of this product's exceptional toughness and abrasion resistance, castings made with TC-9460 A/B are particularly suitable for mining and mineral process industries.

#### **PRODUCT HIGHLIGHTS:**

- High impact resistance
- Low viscosity
- Exceptionally tough, abrasion resistant
- Contains no TDI, MDI, MDA, OR MOCA
- Easy to handle
- Room temperature mixing and curing
- Mercury free

#### **PHYSICAL PROPERTIES:**

Hardness, Shore D ASTM D-2240 .....	60 ± 5
Density, (g/cc) ASTM D-792 .....	1.07
Cubic Inches Per Pound .....	26.4
Color/Appearance .....	Amber/Transparent
Tensile Strength, (psi) ASTM D-638 .....	4,800
Tensile Modulus, (psi) ASTM D-638 .....	4.7 x 10 <sup>4</sup>
Elongation, (%) ASTM D-638 .....	325
Tear Strength, (pli) ASTM D-624 .....	565
Shrinkage, (in./in.) linear (ASTM D-2566) .....	0.002
Flexural Strength, (psi) ASTM D-790 .....	1,590
Flexural Modulus, (psi) ASTM D-790 .....	4.0 x 10 <sup>4</sup>
Izod Impact, notched (ft.-lb./in.) ASTM D-256 .....	14.0

#### **HANDLING PROPERTIES:**

Mix Ratio (by weight):

Part A .....	100 parts by weight
Part B .....	60 parts by weight

## **HANDLING PROPERTIES (Cont'd):**

### Mix Ratio (by volume):

Part A ..... 100 parts by volume  
Part B ..... 60 parts by volume

### Specific Gravity:

Part A ..... 1.05  
Part B ..... 1.06

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

Part A ..... 6,640  
Part B ..... 130  
Mixed ..... 1,700

### Color:

Part A ..... Clear/Colorless  
Part B ..... Amber

Work Time (100-gram mass) @ 77°F (25°C) ..... 15 Minutes

Gel Time ..... 25 Minutes

Demold Time, 77°F (25°C) ..... 4 - 5 hours; can be reduced  
with moderately elevated material and/or mold temperatures

Cure Schedule ..... 3 - 5 days at ambient temperatures or 16 hours @ 150° - 180°F (66° - 82°C) (See NOTE)

## **NOTE:**

Post-curing TC-9460 A/B within this temperature range, (see Cure Schedule above) immediately after demolding will provide the optimum physical properties (Tensile, Tear Strength and overall toughness).

## **STORAGE:**

Store in a dry place at room temperature. Unopened containers have a shelf life of 6 months from date of shipment when properly stored under normal temperature conditions, 77° ± 15°F (25° ± 10°C). Opened containers should be purged with dry nitrogen or equivalent product before resealing the lids.

## **PACKAGING:**

1 Gallon kits ..... 8 lbs. A, 4.8 lbs. B  
5 Gallon kits ..... 40 lbs. A, 24 lbs. B  
55 Gallon drum kits ..... 400 lbs. A, 240 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.**