

# TC-8750 A/B CASTABLE HIGH PERFORMANCE 55 SHORE D POLYURETHANE ELASTOMER

#### PRODUCT HIGHLIGHTS:

- Exceptionally tough, abrasion resistant, high impact material
- > SAFE Contains no TDI, MDI, MDA, OR MOCA
- Easy to handle
- > Room temperature mixing and curing

#### **PRODUCT DESCRIPTION**:

TC-8750 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-8750 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-8750 A/B are particularly suitable for mining and mineral process industries.

# **TYPICAL PRODUCT USES:**

- ♦ Abrasion-resistant parts and lining
- Foundry patterns and core box liners
- Roller facings and casters
- ♦ Potting and encapsulation
- Cutting table tops
- ♦ Metal forming die facings
- ♦ Troughs, chutes and other equipment contacting any abrasive materials
- Machinery base pads and gears

## **PHYSICAL PROPERTIES:**

Hardness, Shore D ASTM D-2240	$55 \pm 2$
Specific Gravity, (g/cc) cured ASTM D-792	
Cubic Inches Per Pound	
Color/Appearance	Amber/Transparent
Tensile Strength, (psi) ASTM D-412	
Elongation, (%) ASTM D-412	450
Flexural Strength, (psi) ASTM D-790	970
Flexural Modulus, (psi) ASTM D-790	25,160
Tear Strength, (pli) ASTM D-624	600
Shrinkage, (in./in.) linear ASTM D-2566	0.002

## **HANDLING PROPERTIES:**

Mix Ratio (by weight):		
Part A	by weight	
Part A       100 parts I         Part B       30 parts I	by weight	
Specific Gravity (g/cc):		
Part A Part B	1.12	
Part B	1.17	
Viscosity, (cps) @ 77°F (25°C) Brookfield:		
Part A	$500 \pm 200$	
Part B	250	
Part B	$000 \pm 500$	
Color:		
Part ACle	ear amber	
Part B	ark amber	
Work Time, (100g mass) @ 77°F (25°C)	5 minutes	
Gel Time2		
Demold Time, 77°F (25°C)4 - 6 hours at ambient temperature; can be reduced to 2	- 3 hours	
with moderately elevated material and/or mold tem	peratures	
Cure Schedule3 - 5 days at ambient temperatures or 16 hours @ 150° - 180°F (66°	- 82°C).	
NOTE: Post-curing the TC-8750 A/B within this temperature range immediately after demolding, will provide the		
optimum in 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,  $77^{\circ} \pm 15^{\circ}F$  ( $25^{\circ} \pm 10^{\circ}C$ ). Opened containers should be purged with dry nitrogen or equivalent product before resealing the lids.

# PACKAGING:

1 Gallon kits	
5-Gallon kits	
55-Gallon drum kits.	

#### **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 laundry 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.