



TC-8772 A/B

HIGH PERFORMANCE 70 SHORE D

POLYURETHANE ELASTOMER

PRODUCT HIGHLIGHTS:

- ✓ Exceptional abrasion and impact resistance.
- ✓ SAFE - Contains no TDI, MDI, MDA, OR MOCA.
- ✓ Easy to handle.
- ✓ Room temperature mixing and curing.

PRODUCT DESCRIPTION:

TC-8772 A/B is a two-component urethane casting compound that is specifically formulated for high abrasion and impact resistance. It is recommended for use for the production 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-8772 A/B is relatively insensitive to typical environmental moisture and will make excellent void-free parts without the problems that some conventional urethane systems exhibit. The low viscosity and simple mix ratio assure uniform and easy mixing. Because of this product's exceptional toughness and abrasion resistance, castings made with TC-8772 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.....	70 ± 2
Specific Gravity (gm/cc) cured	1.14
Cu. in per pound (displacement).....	24.4
Color	Translucent/Amber
Tensile Strength (psi) ASTM D-638.....	5025
Tensile Modulus ASTM D-638	5.4 x 10 ⁴
Tear Strength (pli)	760
Flexural Strength (psi) ASTM D 790, Procedure A.....	2070
Flexural Modulus (psi) ASTM D-790, Procedure A.....	54,000
Elongation (%) ASTM D-638.....	480
Shrinkage (in./in.).....	0.005
Izod Impact, notched (ft. lb./in.) ASTM D-256.....	>8.8

HANDLING PROPERTIES:

Mix Ratio:	
Part A	100 parts by Weight
Part B	40 parts by Weight
Specific Gravity (gm/cc):	
Part A	1.12
Part B	1.17
Mixed	1.14
Viscosity, (cps) @ 75° F (24° C):	
Part A	4,350
Part B	250
Mixed	2,425
Color:	
Part A	Light Amber
Part B	Dark Amber
Work Life @ 75° F (24° C)	8-10 Minutes
Gel Time (180 gm mass)	12-15 Minutes
Demold Time	Normally 2 to 3 hours at ambient; can be reduced to one hour by pre-warming materials and molds.
Cure Schedule	Full cure in 3 to 5 days at room temperature or 16 hours @ 150° to 180° F (66° ± 82° C) (see NOTE below).

NOTE:

Post-curing within this temperature range (see Cure Schedule above) 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 of TC-8772 A/B will have a shelf life of 6 months, from date of shipment, when properly stored under normal temperature conditions, 77°F ± 15°F (25° ± 10°C) Opened containers are best kept by applying a dry nitrogen blanket before closing lids.

PACKAGING:

1 Gallon kits (pre-weighed)	8 lbs. A, 3.2 lbs. B
5 Gallon kits (pre-weighed)	40 lbs. A, 16 lbs. B
55 Gallon drum kits (pre-weighed)	400 lbs. A, 160 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 and 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. 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 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.