



TC-8764 A/B

CASTABLE HIGH PERFORMANCE 60 SHORE D POLYURETHANE ELASTOMER

PRODUCT HIGHLIGHTS:

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

PRODUCT DESCRIPTION:

TC-8764 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-8764 A/B is relatively insensitive to typical environmental moisture and will make good void-free parts without the problems that some conventional urethane systems exhibit. Because of this products exceptional toughness and abrasion resistance, castings made with TC-8764 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	60 ± 2
Specific Gravity, (g/cc) cured	1.13
Cubic inch per pound	25
Color/Appearance	light amber
Tensile Strength, (psi) ASTM D-638	4,400
Tensile Modulus, (psi) ASTM D-638	41,000
Elongation, (%) ASTM D-638	310
Flexural Strength, (psi) ASTM D-790, Procedure A	1,430
Flexural Modulus, (psi) ASTM D-790, Procedure A	38,700
Tear Strength, (pli) ASTM D-624	510
Shrinkage, (in./in.) ASTM D-2566	0.009
Izod Impact, (ft.-lb./in), ASTM D-256	>10

HANDLING PROPERTIES:

Mix Ratio (by weight):

Part A 100 parts by weight
Part B 50 parts by weight

Mix Ratio (by volume):

Part A 100 parts by volume
Part B 48 parts by volume

Specific Gravity (g/cc):

Part A 1.09
Part B 1.14
Mixed 1.11

Viscosity, (cps) @ 77°F (25°C):

Part A 2,750
Part B 250
Mixed 1,550

Color:

Part A clear, light amber
Part B orange-yellow

Work Time (100-gram mass) @ 77°F (25°C) 12 - 15 minutes

Gel Time (100-gram mass) @ 77°F (25°C) 17 - 20 minutes

Demold Time Normally 2 - 3 hours at ambient temperature; can be reduced to
one hour with moderately elevated temperatures and/or molds.

Cure Schedule: Full cure in 3 - 5 days at room temperature or post-cured
16 hours @ 150° - 180°F (66° - 82°C) (see NOTE).

NOTE:

Post-curing the TC-8764 A/B soon after demolding will enhance mechanical properties (tensile strength, tear strength and overall toughness), but may slightly increase shrinkage.

STORAGE:

Store in a dry place at room temperature. Unopened containers of TC-8764 A/B will have a shelf life of 6 months, from date of shipment, when properly stored under normal temperature conditions, 75° ± 15°F (24° ± 10°C). Previously opened containers are best kept by applying a dry nitrogen blanket before closing lids.

PACKAGING:

1 Gallon kits 8 lbs. A, 4 lbs. B
5 Gallon kits 40 lbs. A, 20 lbs. B
55-Gallon drum kits 400 lbs. A, 200 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. Seek qualified medical attention if allergic reactions occur.

Eyes: Immediately flush eyes 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.