



TC-8740 A/B

HIGH PERFORMANCE 40 SHORE D

POLYURETHANE ELASTOMER

PRODUCT DESCRIPTION:

TC-8740 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 MDI, MDA, or MOCA. TC-8740 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 product's exceptional toughness and abrasion resistance, castings made with TC-8740 A/B are particularly suitable for mining and mineral process industries.

PRODUCT HIGHLIGHTS:

- Exceptional abrasion and impact resistant
- Contains no MDI, MDA or MOCA
- Easy to handle
- Room temperature mixing and curing

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.....	40 ± 2
Density, (g/cc) ASTM D-792.....	1.09
Cubic Inches Per Pound	28
Color/Appearance.....	Amber/Transparent
Tensile Strength, (psi) ASTM D-412.....	3,870
Tensile Modulus, (psi) ASTM D-412.....	1.68 x 10 ⁴
@ 100% Strain	2,100
@ 200% Strain	2,490
@ 300% Strain	3,070
Elongation, (%) ASTM D-412.....	550
Tear Strength, (pli) ASTM D-624	463
Shrinkage, (in./in.) linear ASTM D-2566.....	0.003

HANDLING PROPERTIES:

Mix Ratio (by weight):	
Part A	100 parts by weight
Part B	25 parts by weight
Mix Ratio (by volume):	
Part A	100 parts by volume
Part B	23 parts by volume
Specific Gravity:	
Part A	1.09
Part B	1.17
Viscosity, (cps) @ 77°F (25°C) Brookfield:	
Part A	6,150
Part B	250
Mixed	3,425
Color:	
Part A	Light Amber
Part B	Dark Amber
Work Time, (100-gram mass) @ 77°F (25°C).....	20 Minutes
Gel Time	35 Minutes
Demold Time @ 77°F (25°C).....	Normally 4 - 6 hours at ambient; can be reduced to one hour with moderately elevated temperatures and/or molds.

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).

STORAGE:

Store in a dry place at room temperature. Unopened containers of TC-8740 A/B will 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 are best kept by applying a dry nitrogen blanket before closing lids.

PACKAGING:

1 Gallon kits.....	8 lbs. A, 2 lbs. B
5 Gallon kits.....	40 lbs. A, 10 lbs. B
55-Gallon drum kits.....	400 lbs. A, 100 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.

NON-WARRANTY "Except for a warranty that materials substantially comply with the data presented in Manufacturer's latest bulletin describing the product (the basis for this substantial compliance is to be determined by the standard quality control tests generally performed by Manufacturer), all materials are sold "AS IS" and without any warranty express or implied as to merchantability, fitness for a particular purpose, patent, trademark or copyright infringement, or as to any other matter. In no event shall Manufacturer's liability for damages exceed Manufacturer's sale price of the particular quantity with respect to which damages are claimed."