



# TC-9462 A/B

## CASTABLE HIGH PERFORMANCE 60 SHORE D POLYURETHANE ELASTOMER

### PRODUCT DESCRIPTION:

TC-9462 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-9462 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-9462 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 D2240-04e1 .....           | 60 ± 5                 |
| Density, (g/cc) ASTM D792-00 .....                | 1.09                   |
| Cubic Inches per Pound .....                      | 26                     |
| Color/Appearance.....                             | Amber/Transparent      |
| Tensile Strength, (psi) ASTM D638-03.....         | 5,000                  |
| Tensile Modulus, (psi) ASTM D638-03.....          | 2.19 x 10 <sup>4</sup> |
| Elongation, (%) ASTM D638-03.....                 | 525                    |
| Tear Strength, (pli) ASTM D624-00e1.....          | 585                    |
| Shrinkage, (in/in) linear ASTM D2566.....         | 0.002                  |
| Flexural Strength, (psi) ASTM D790-00 .....       | 1,930                  |
| Flexural Modulus, (psi) ASTM D790-00.....         | 4.78 x 10 <sup>4</sup> |
| Izod Impact, notched (ft-lb/in) ASTM D256-05..... | 14.0                   |

### HANDLING PROPERTIES:

Mix Ratio (by weight):

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

Mix Ratio (by volume):

|              |                     |
|--------------|---------------------|
| Part A ..... | 100 parts by volume |
| Part B ..... | 58 parts by volume  |

**HANDLING PROPERTIES (continued):**

Specific Gravity:

|              |      |
|--------------|------|
| Part A ..... | 1.05 |
| Part B ..... | 1.09 |

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

|              |       |
|--------------|-------|
| Part A ..... | 6,650 |
| Part B ..... | 200   |
| Mixed .....  | 2,450 |

Color:

|              |           |
|--------------|-----------|
| Part A ..... | 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

**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 cool dry place. Unopened containers have a shelf life of 6 months from date of shipment when properly stored at room temperatures. Purge opened containers with dry nitrogen before re-sealing.

**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.**