



## **TC-882 FR A/B**

### **RIGID 80 SHORE D URETHANE CASTING SYSTEM**

### **FIRE RETARDANT**

#### **PRODUCT DESCRIPTION:**

TC-882 FR A/B produces a rigid 80 Shore D material that is commonly used to make large computer housings, models of all kinds and artwork components. It provides the longest working time of 30 minutes, vs. 15 minutes for the TC-881 FR A/B, and 5 - 8 minutes with the TC-880 FR A/B. The three systems produce the same physical properties after curing. However, the TC-882 FR allows plenty of time to pour large size castings.

#### **PRODUCT HIGHLIGHTS:**

- ✓ Long working time, provides plenty of time for large pours
- ✓ No odor
- ✓ Fire retardant material. Meets UL 94 V-O

#### **PHYSICAL PROPERTIES:**

Hardness, Shore D ASTM D-2240.....	80 ± 2
Density, (g/cc) ASTM D-792.....	1.25
Cubic Inches per Pound .....	22.3
Color/Appearance.....	Opaque/White
Tensile Strength, (psi) ASTM D-638.....	6,450
Tensile Modulus, (psi) ASTM D-638.....	127,500
Elongation, (%) ASTM D-638.....	4.0
Shrinkage, (in./in.) linear (12" x ½" x ½") .....	0.001
Izod Impact, notched (ft.lb./in.) ASTM D-256.....	0.56
Heat Deflection Temperature (@ 66 psi) ASTM D-648.....	150° F (66° C)

#### **HANDLING PROPERTIES:**

Mix Ratio (by weight):

Part A .....	67 parts by weight
Part B .....	100 parts by weight

Mix Ratio (by volume):

Part A .....	75 parts by volume
Part B .....	100 parts by volume

Specific Gravity:

Part A .....	1.18
Part B .....	1.30

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

Part A .....	200
Part B .....	1050
Mixed .....	400

## **HANDLING PROPERTIES (Cont'd):**

Color:

Part A ..... Translucent yellow

Part B ..... White

Work Time (100-gram mass) @ 77°F (25°C) ..... 30 minutes

Demold Time @ 77°F (25°C) ..... 16 - 24 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 180°F (82°C). Support of the part may be required to prevent part deformation during heat cure.

## **VACUUM DEGASSING:**

It is advisable whenever possible to evacuate entrapped air prior to casting this system. Adding a de-airing agent during mixing, such as BJB's AF-4, will speed up this process. For additional information on the use of this product, refer to BJB Guidelines for Handling Polyurethane Products or call BJB for assistance.

## **STORAGE:**

Store in a cool dry place. Unopened containers will have a shelf life of 6 months from date of shipment when properly stored at room temperatures. **Purge opened containers with dry nitrogen or an equivalent dry air purge before re-sealing.**

## **PACKAGING:**

5 Gallon Kit ..... 27 lbs. A, 40 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.**