



TC-881 FR A/B

RIGID 80 SHORE D URETHANE CASTING SYSTEM

FIRE RETARDANT

PRODUCT DESCRIPTION:

TC-881 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 a working time of 15 minutes, versus 5 minutes for TC-880 FR, and 30 minutes for TC-882 FR. The three systems produce the same physical properties after curing.

PRODUCT HIGHLIGHTS:

- ✓ Long working time, provides plenty of time for large pours
- ✓ No odor
- ✓ UL 94 VO Flammability Rating at 0.125" thickness

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.....	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 1/2" x 1/2")	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
Part C	400

Color:

Part A	Translucent yellow
Part B	White

Work Time @ 77°F (25° C)..... 15 minutes

Demold Time @ 77°F (25°C)..... 5-6 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. The use of a de-airing agent (BJB's AF-4) can speed up the process. If help is required call BJB for assistance. For additional information on the use of this product, refer to BJB Guidelines for Handling Polyurethane Products.

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:

Gallon Kits..... 5.4 lbs. A, 8 lbs. B
5 Gallon Kits..... 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.