



TC-881 A/B

RIGID 80 SHORE D URETHANE CASTING SYSTEM

PRODUCT DESCRIPTION:

TC-881 A/B produces a high impact 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.

PRODUCT HIGHLIGHTS:

- ✓ High impact rigid material
- ✓ Intermediate working time. Provides adequate time for medium to large pours.
- ✓ No odor, no exudates
- ✓ Will prolong the life of a silicone mold
- ✓ Easy to handle; 1 to 1 mix ratio by weight

TYPICAL PRODUCT USES:

- ✓ Computer Housings
- ✓ Models of all kinds
- ✓ Artwork components
- ✓ Architectural models
- ✓ Gears, wheels, fans
- ✓ Transportation cases
- ✓ Miniatures movie props parts
- ✓ Simulating injection molded pieces

PHYSICAL PROPERTIES:

Hardness, Shore D ASTM D-2240.....	80 ± 2
Specific Gravity, (g/cc) cured ASTM D-792	1.12
Cubic Inches per Pound	24.8
Color/Appearance.....	Cream
Tensile Strength, (psi) ASTM D-638.....	5,500
Tensile Modulus, (psi) ASTM D-638.....	2.1 x 10 ⁵
Elongation, (%) ASTM D-638.....	15.5
Flexural Strength, (psi) ASTM D-790.....	7,100
Flexural Modulus, (psi) ASTM D-790	2.0 x 10 ⁵
Shrinkage, (in./in.) ASTM D-2566 (3/8" depth)	0.005
Izod Impact, (ft.lb./in.) ASTM D-256.....	0.75
Compressive Strength, (psi) ASTM D-695	85,000

Note: Reported physical properties based on elevated temperature cured test specimens

HANDLING PROPERTIES:

Mix Ratio (by weight):

Part A 100 parts by weight

Part B 100 parts by weight

Mix Ratio (by volume):

Part A 90 parts by volume

Part B 100 parts by volume

Specific Gravity, (g/cc):

Part A 1.18

Part B 1.05

Mixed Viscosity (cps) @ 77°F (25°C) 250 ± 10

Color:

Part A Clear, Faint Yellow

Part B Hazy, Off White

Work Time, 100g mass @ 77°F (25°C) 15 minutes

Demold Time @ 77°F (25°C) 5 - 6 hours

Cure Schedule..... For maximum physical properties the material should be post cured
at 160°F (71°C) for 6 hours. This gives an HDT of 140°F (60°C).

HEAT CURING:

Enhanced physical properties can be achieved by post-curing TC-881 parts for a period of 4 to 6 hours at a minimum of 150°F (66°C) and to a maximum of 175°F (79°C). Six hours at 160°F (71°C) will provide a final heat distortion temperature @ 66 psi of 140°F (60°C). Parts generally should be supported during post-cures.

VACUUM DEGASSING:

It is advisable whenever possible to evacuate entrapped air prior to casting this system. The use of a de-airing agent can speed up the process. BJB's AF-4 antifoam works best as the de-airing agent. In conjunction with these support products BJB offers pigments in a wide variety of colors and stainless steel mixers called "Jiffy Mixers". 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 before re-sealing.

PACKAGING:

Gallon Kits 8 lbs. A, 8 lbs. B

5-Gallon Kits 40 lbs. A, 40 lbs. B

55-Gallon Drum Kits 450 lbs. A, 450 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.