



TC-876 A/B

RIGID 80 SHORE D URETHANE CASTING SYSTEM

PRODUCT HIGHLIGHTS:

- ✓ High impact rigid material
- ✓ Mix ratio of 1 to 1 by volume
- ✓ No odor or exudates
- ✓ Fast setting; short demold time

PRODUCT DESCRIPTION:

TC-876 A/B is a two-component liquid castable urethane that produces a high impact 80 Shore D engineering plastic. Typically, it is used for making production-molded parts. With a working time of 2 - 3 minutes, a volume ratio of one to one and low viscosity, TC-876 A/B is ideally suited for "meter mix" machine dispensing.

TYPICAL PRODUCT USES:

- ✓ Computer Housings
- ✓ Models of all kinds
- ✓ Artwork components
- ✓ Architectural models
- ✓ Gears, wheels, fans
- ✓ Transportation cases
- ✓ Levels, pedals
- ✓ 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	1.16
Cubic Inches per Pound	24.8
Color/Appearance.....	Opaque Off White
Tensile Strength, (psi) ASTM D 638.....	7,415
Tensile Modulus, (psi) ASTM D-638.....	4.8 X 10 ⁵
Elongation (%) ASTM D-638.....	65
Flexural Strength, (psi) ASTM D-790	8800
Flexural Modulus, (psi) ASTM D-790.....	2.5 X 10 ⁵
Shrinkage (in./in.) linear (12" x 1/2" x 1/2")	0.003
Izod Impact, (ft.-lb. / in), ASTM D-256.....	0.85

HANDLING PROPERTIES:

Mix Ratio (by weight):

Part A	100 parts by weight
Part B	90 parts by weight

Mix Ratio (by volume):

Part A	100 parts by volume
Part B	100 parts by volume

HANDLING PROPERTIES (continued):

Specific Gravity (g/cc):

Part A	1.18
Part B	1.05

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

Part A	150
Part B	450
Mixed	300

Color:

Part A	Translucent yellow
Part B	Off white

Work Time, 100g mass @ 77° F (25°C) 3 minutes

Demold Time @ 77°F (25°C)..... 1-1.5 hours

HEAT CURING:

Enhanced physical properties can be achieved by post-curing TC-876 A/B 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 175° F (79°C) will provide a final heat distortion temperature of 175° F \pm 5 (79°C \pm 3°C). Parts may require support during post-cure.

NOTE:

It is advisable whenever possible to evacuate entrapped air prior to casting this system. The use of de-airing agent can speed 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". 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, 7.2 lbs. B
5 Gallon Kits.....	40 lbs. A, 36 lbs. B
55-Gallon Drum Kits.....	450 lbs. A, 405 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. 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.