



## RC-8030 A/B

### 82 SHORE D URETHANE CASTING SYSTEM WITH HIGH HEAT RESISTANCE

#### PRODUCT DESCRIPTION:

RC-8030 A/B is a rigid, 82 Shore D, two-component castable urethane with higher heat resistance than standard machine cast urethane systems. RC-8030 A/B has been designed to meet a wide variety of part making applications that range from electronic enclosures to mechanical parts. RC-8030 A/B can also be demolded in 30 minutes depending on part thickness and mold conditions.

The RC-8030 A/B has a work time of approximately 60 seconds and meter mix dispensing equipment is recommended for processing. BJB offers meter mix dispensing equipment ranging from hand operated static mix systems to air-power operated production systems. Call BJB's technical representatives to provide processing information assistance.

#### PRODUCT HIGHLIGHTS:

- ◆ Convenient 1:1 by volume mix ratio for automated and manual dispensing equipment
- ◆ 230°F (110°C) Heat Deflection @ 66 psi
- ◆ Fast demold times
- ◆ Low viscosity and rapid flow out for thin wall parts
- ◆ High flexural strength
- ◆ Non-mercury based catalyst system

#### PHYSICAL PROPERTIES:

Hardness, Shore D ASTM D-2240.....	82 ± 2
Specific Gravity, (g/cc) ASTM D-792.....	1.19
Cubic inches per pound.....	24.4
Color/Appearance.....	Opaque/cream
Tensile Strength, (psi) ASTM D-638.....	9,500
Tensile Modulus, (psi) ASTM D-638.....	2.9 x 10 <sup>5</sup>
Elongation, (%) ASTM D-638.....	8
Flexural Strength, (psi) ASTM D-790.....	12,300
Flexural Modulus, (psi) ASTM D-790.....	3.1 x 10 <sup>5</sup>
Shrinkage, (in./in.) (0.25" x 0.5" x 12") (open cast):	
Post-cured, (see post-cure note).....	0.004
Izod Impact, (ft.-lb./in.) ASTM D-256.....	0.67
Heat Deflection Temperature, (66 psi) ASTM D-648.....	230°F (110°C)
(264 psi) ASTM D-648.....	220°F (104°C)

(Note: Physical properties obtained from test specimens post cured per recommended procedure.)

**HANDLING PROPERTIES:**

Mix Ratio (by weight):	
Part A .....	100 parts by weight
Part B .....	85 parts by weight
Mix Ratio (by volume):	
Part A .....	100 parts by volume
Part B .....	100 parts by volume
Specific Gravity, (g/cc):	
Part A .....	1.24
Part B .....	1.04
Viscosity (cps) @ 77°F (25°C)	
Part A .....	300
Part B @ 77°F/110°F (25°C/43°C) .....	1,300/300
Mixed @ 77°F/110°F (25°C/43°C) .....	750/300
Color:	
Part A .....	Brown
Part B .....	White
Gel Time @ 77°F (25°C) .....	55 - 65 seconds
Demold Time, closed mold .....	30-45 minutes

**RECOMMENDED PROCESSING PROCEDURES:**

Both A & B components need to be pre-warmed and pre-blended prior to use. The "A" component should be conditioned to 80° - 90°F (27° - 32°C) and the "B" component warmed to 110° - 125°F (43° - 52°C). Stir both sides to blend at the recommended temperatures *prior* to combining.

**CURING:**

RC-8030 A/B will fully cure at ambient temperatures in 2 - 3 days, however 80-90% of the physical properties will be achieved in a 24-hour period. Some mechanical properties will be slightly lower than published if not post cured with heat.

**POST-CURING RECOMMENDED PROCEDURE:**

After demolding, allow parts to further cure at room temperature for 2 to 4 hours. It is recommended that parts be post cured at 120°F - 130°F (49°C - 54°C) for 2 - 4 hours, followed by 4 - 6 hours at 180° ± 10°F (82° ± 10°C). Support may be needed for certain configurations during this process.

**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 temperature. Purge opened containers with dry nitrogen before re-sealing. Electric band heaters for material feed containers may be required during cold weather periods.

**PACKAGING:**

1 Gallon kits.....	8 lbs. A, 6.8 lbs. B
5 Gallon kits.....	40 lbs. A, 34 lbs. B
Drum kits .....	400 lbs. A, 340 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.**