

## RIGID FILLED & UNFILLED URETHANES

"Dedicated to QUALITY, SERVICE, SAFETY, and INNOVATION"

# BR-75D REV 1 BRUSHABLE A/B 75 SHORE D POLYURETHANE



Date: 06/08/2017

BR-75D REV 1 Brushable is a 75 Shore D rigid high impact material. This product is designed to be either brushed into a mold to create a durable hard-shell part, or brushed onto the back of silicone glove molds to create a tough "mother mold" or shell.

- RoHS/REACH Compliant
- Special Effects & Props
- Popular for Parts & Molds
- High Impact

- Easy to Pigment
- Easy Mix Ratio

| PHYSICAL PROPERTIES        | TEST METHOD           | RESULTS*     |  |
|----------------------------|-----------------------|--------------|--|
| Hardness, Shore D          | ASTM D2240-04e1       | 75 ± 5       |  |
| Density (g/cc)             | ASTM D792-00          | 1.116        |  |
| Cubic Inches per Pound     | N/A                   | 25.67        |  |
| Color/Appearance           | Visual                | Opaque Cream |  |
| Tensile Strength (psi)     | ASTM D412-98a(2002)e1 | 3,600        |  |
| Tensile Modulus (psi)      | ASTM D412-98a(2002)e1 | 1.5 x 10⁵    |  |
| Elongation (%)             | ASTM D412-98a(2002)e1 | 15           |  |
| Tear Strength (pli)        | ASTM D624-00e1        | 155          |  |
| Dielectric Constant, 1 MHz | ASTM D150-87          | 3.172        |  |
| Dissipation Factor, 1 MHz  | ASTM D150-87          | 0.0287       |  |

<sup>\*</sup>Note: Reported physical properties are based on test specimens cured 1-3 hours at room temperature then 16 hours at 160°F (71°C).

| HANDLING PROPERTIES                            | Part A          | Part B |  |
|--|-----------------|--------|--|
| Mix Ratio by weight                            | 100             | 100    |  |
| Mix Ratio by volume                            | 86              | 100    |  |
| Specific Gravity @ 77°F (25°C)                 | 1.15            | 1.001  |  |
| Color  | Pale Yellow     | Cream  |  |
| Viscosity (cps) @ 77°F (25°C) Brookfield       | 425             | 18,000 |  |
| Mixed Viscosity (cps) @ 77°F (25°C) Brookfield | 24,000          |        |  |
| Work Time, 100g mass @ 77°F (25°C)             | 10 – 12 minutes |        |  |
| Gel Time                                       | 14 – 16 minutes |        |  |
| Demold Time @ 77°F (25°C)                      | 2 – 3 hours     |        |  |

Properties above are typical and not for specifications.

#### IMPORTANT MIXING DIRECTION:

It is important to remix the "B" component thoroughly prior to combining with the "A" side.

#### **CURE SCHEDULE/HEAT CURING:**

Most of the physical properties can be achieved in 5-7 days at 77°F (25°C). You may use your own post-cure schedule but the physical properties may vary from BJB's cure schedule of 1-3 hours at 77°F (25°C) followed by 16 hours at 160°F (71°C). Do not exceed curing temperature of 200°F (93°C). Support of the part may be required to prevent part deformation during the heat curing process.

#### **COLOR VARIATIONS:**

The color of the base material may vary slightly from batch to batch due to raw ingredients. Color variations will not affect the cured physical properties. Exposing the material to various conditions such as heat and UV light will alter the color of the cured system. Color stability is not guaranteed. This product can be pigmented, but you may see more color shift when using lighter pigments.

#### **UV RESISTANCE:**

This product is not classified as UV resistant. BJB offers an additive called UV-100, a UV inhibitor and anti-oxidant blend that will help slow down the effects of UV degradation and color change. The level of effectiveness varies from product to product.

#### ACCESSORIES

BJB offers silicone RTV mold making materials along with a wide range of accessory items. These include de-airing agents, pigments, mold releases, and Jiffy® Mixers. Visit BJB's website at <a href="www.bjbenterprises.com">www.bjbenterprises.com</a> or consult a BJB representative for more information.

#### STORAGE:

Store at ambient temperatures, 65-80°F (18-27°C). Unopened containers will have a shelf life of 6 months from date of shipment when properly stored at recommended temperatures. Purge opened containers with dry nitrogen before re-sealing.

| PACKAGING     | Part A   | Part B   | Cubic Inches per<br>Kit |
|---------------|----------|----------|-------------------------|
| Quart Kits    | 1.5 lbs. | 1.5 lbs. | 77                      |
| Gallon Kits   | 6 lbs.   | 6 lbs.   | 308                     |
| 5-Gallon Kits | 30 lbs.  | 30 lbs.  | 1,540                   |

### **SAFETY PRECAUTIONS:**

Use in a well-ventilated area. Avoid contact with skin using protective gloves and protective clothing. Repeat 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.



Handling Guide



BR-75D REV 1 Brushable Part A SDS



BR-75D REV 1 Brushable Part B SDS

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For more information call BJB Enterprises, Inc. (714) 734-8450 Fax (714) 734-8929

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