

# RIGID FILLED & UNFILLED URETHANES

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

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



Date: 01/19/2015

BR-75D 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
- Popular for Parts & Molds
- Easy to Pigment

- Special Effects & Props
- High Impact

Easy Mix Ratio

PHYSICAL PROPERTIES	TEST METHOD	RESULTS*
Hardness, Shore D	ASTM D2240-04e1	75 ± 5
Density (g/cc)	ASTM D792-00	1.15
Cubic Inches per Pound	N/A	24.9
Color/Appearance	Visual	Translucent Amber
Tensile Strength (psi)	ASTM D412-98a(2002)e1	6,600
Tensile Modulus (psi)	ASTM D412-98a(2002)e1	1.7 x 10⁵
Elongation (%)	ASTM D412-98a(2002)e1	14
Tear Strength (pli)	ASTM D624-00e1	225
Dielectric Constant, 1 MHz	ASTM D150-87	3.114
Dissipation Factor, 1 MHz	ASTM D150-87	0.0237

<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	50	
Mix Ratio by volume	100	52	
Specific Gravity @ 77°F (25°C)	1.128	1.085	
Color	Pale Yellow	Amber	
Viscosity (cps) @ 77°F (25°C) Brookfield	7,700	2,900	
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	45,000		
Work Time, 100g mass @ 77°F (25°C)	10 – 15 minutes		
Gel Time	15 – 20 minutes		
Demold Time @ 77°F (25°C)	2 – 3 hours		

Properties above are typical and not for specifications.

# **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 Kit
Quart Kits	2 lbs.	1 lbs.	74.7
Gallon Kits	8 lbs.	4 lbs.	298.8
5-Gallon Kits	40 lbs.	20 lbs.	1,494

# **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 Brushable Part A SDS



BR-75D Brushable Part B SDS

Date: 01/19/2015

Quality Management System Registered to ISO 9001:2008

BR-75D Brushable A/B Page 2 of 2

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