

# SKINFLEX

## BR-90 BRUSHABLE A/B

### 90 SHORE A POLYURETHANE ELASTOMER



BR-90 Brushable is a flexible 90 Shore A polyurethane material designed to be brushed into molds to produce tough skins. The common uses for this product include the creation of soft, yet durable skins for animated characters, costumes, prosthetics, and various parts and molds. BR-90 is often used in conjunction with flexible polyurethane foams as support to produce lightweight parts with a tough, durable skin.

BR-90 Brushable can be used with SC-22 Softening Agent to lower the hardness and increase stretch characteristics for the desired application. SC-40 may also be added to increase the viscosity of BR-90 and build thicker layers.

- RoHS/REACH Compliant
- Popular for Parts & Molds
- Easy to Pigment
- Special Effects & Props
- Medical Training Models

PHYSICAL PROPERTIES	TEST METHOD	RESULTS*
Hardness, Shore A	ASTM D2240-04e1	90 ± 5
Density (g/cc)	ASTM D792-00	1.1
Cubic Inches per Pound	N/A	25.43
Color/Appearance	Visual	Amber/Translucent
Tensile Strength (psi)	ASTM D412-98a(2002)e1	2,550
Tensile Modulus (psi)	ASTM D412-98a(2002)e1	12,800
Elongation (%)	ASTM D412-98a(2002)e1	530
Tear Strength (pli)	ASTM D624-00e1	420
Dielectric Constant, 1 MHz	ASTM D150-87	4.479
Dissipation Factor, 1 MHz	ASTM D150-87	0.0461

\*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	95	100
Specific Gravity @ 77°F (25°C)	1.117	1.065
Color	Pale Yellow	Amber
Viscosity (cps) @ 77°F (25°C) Brookfield	20,500	Paste
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	55,000	
Work Time, 100g mass @ 77°F (25°C)	10 – 15 minutes	
Gel Time	20 – 25 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).

### **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 [www.bjbenterprises.com](http://www.bjbenterprises.com) 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.	2 lbs.	102
Gallon Kits	8 lbs.	8 lbs.	407
5-Gallon Kits	40 lbs.	40 lbs.	2,034

### **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 laundry 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-90 Brushable Part A SDS



BR-90 Brushable Part B SDS