

# SHORE A POLYURETHANES

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

# FP-15 REV 1 A/B 15 SHORE A POLYURETHANE ELASTOMER



Date: 01/05/2017

BJB's "FP" (Fast Production) Series of products range from 15 to 90 Shore A. You'll find their 4 to 5 minute work time can easily be "demolded, tack free and tough" in under an hour. The 1:1 ratio and low viscosity makes these translucent materials easy to mix, pour and pigment. FP-15 REV 1 is ideal for hand casting.

- RoHS/REACH Compliant
- Translucent and easy to pigment
- Low viscosity and easy to mix

- Demold in under an hour
- 5-6 minute work time
- Simple ratio

PHYSICAL PROPERTIES	TEST METHOD	7 DAY AMBIENT CURE	ELEVATED TEMPERATURE CURE*
Hardness, Shore A	ASTM D2240-04e1	15 ± 5	15 ± 5
Density (g/cc)	ASTM D792-00	1.013	1.013
Cubic Inches per Pound	N/A	27.51	27.51
Color/Appearance	Visual	Translucent Amber	Translucent Amber
Tensile Strength (psi)	ASTM D412-98a(2002)e1	TBD	300
Tensile Modulus (psi)	ASTM D412-98a(2002)e1	TBD	80
Elongation (%)	ASTM D412-98a(2002)e1	TBD	500
Tear Strength (pli)	ASTM D624-00e1	TBD	30
Shrinkage (in/in) linear	ASTM D2566 @ 1" depth	0.0010 <sup>†</sup>	TBD
Dielectric Constant, 1 MHz	ASTM D150-87	5.184	5.184
Dissipation Factor, 1 MHz	ASTM D150-87	0.0466	0.0466

<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).

†Shrink test specimens are cured for 24 hours at room temperature and then 16 hours at 160°F (71°C).

HANDLING PROPERTIES	Part A	Part B	
Mix Ratio by weight	100	100	
Mix Ratio by volume	100	96	
Specific Gravity @ 77°F (25°C)	0.985	1.031	
Color	Pale Yellow	Amber	
Viscosity (cps) @ 77°F (25°C) Brookfield	85	1,550	
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	75	750	
Work Time, 100g mass @ 77°F (25°C)	5 min	5 minutes	
Gel Time	7 – 8 m	7 – 8 minutes	
Demold Time @ 77°F (25°C)	45 – 75 r	45 – 75 minutes	

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).

#### NOTE

The cure may be inhibited if cast against a relatively new tin catalyzed (condensation cure) silicone RTV.

#### **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 or consult a BJB representative for more information.

## **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.

#### **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.	110
Gallon Kits	8 lbs.	8 lbs.	440
5-Gallon Kits	40 lbs.	40 lbs.	2,201
55-Gallon Drum Kits	440 lbs.	440 lbs.	24,209

### **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



FP-15 REV 1 Part A SDS



FP-15 REV 1 Part B SDS

Date: 01/05/2017

Quality Management System Registered to ISO 9001:2008

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