



SHORE A POLYURETHANES

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

F-50 A/B 55 SHORE A POLYURETHANE ELASTOMER

PRODUCT DESCRIPTION:

The F-50 A/B is a 55 Shore A production-oriented polyurethane system. This material features quick demold times, excellent physical properties and a non-mercury based catalyst. F-50 A/B processes at ambient temperatures and is easily colored.

PRODUCT HIGHLIGHTS:

- Non-mercury
- Rapid demolds
- Ideal for part production
- Does not contain MOCA, MDA, or TDI
- Very easy to use
- Excellent tear strength and toughness

PHYSICAL PROPERTIES:

Hardness, Shore A ASTM D2240	55 ± 5
Density, (g/cc) ASTM D792	1.07
Cubic Inches per Pound.....	26.1
Color/Appearance.....	Pale Yellow/Transparent
Tensile Strength, (psi) ASTM D412.....	845
Tensile Modulus, (psi) ASTM D412	
@ 100% Strain	150
@ 200% Strain	275
@ 300% Strain	390
Elongation, (%) ASTM D412	425
Tear Strength, (pli) ASTM D624.....	95
Shrinkage, (in/in) linear ASTM D2566.....	0.001

HANDLING PROPERTIES:

Mix Ratio (by weight):

Part A	50 parts by weight
Part B	100 parts by weight

Mix Ratio (by volume):

Part A	46 parts by volume
Part B	100 parts by volume

Specific Gravity:

Part A	1.13
Part B	1.03

HANDLING PROPERTIES (continued):

Viscosity, (cps) @ 77°F (25°C) Brookfield:	
Part A	550
Part B	850
Mixed.....	930
Work Time (100-gram mass) @ 77°F (25°C).....	7 - 8 minutes
Gel Time.....	9 - 10 minutes
Demold Time @ 77°F (25°C).....	2 - 3 hours

CURE SCHEDULE/HEAT CURING:

Most of the physical properties can be achieved in 5-7 days at ambient temperature, 77°F (25°C). In order to achieve maximum physical properties, a post cure with heat is required. BJB recommends 24 hours at ambient temperature, 77°F (25°C), followed by 16 hours at 160°F (71°C).

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 temperatures. Purge opened containers with dry nitrogen before re-sealing.

NOTE:

F-50 part B, in liquid form, will darken with age. Opened containers of material should be purged with dry nitrogen prior to replacing lids or caps to prevent moisture contamination. Prolonged direct exposure to sunlight can affect the surface of this product. Cover molds or other products when storing outdoors. **The cure will be inhibited if cast against a tin catalyzed silicone RTV.**

PACKAGING:

Gallon kits.....	4 lbs. A, 8 lbs. B
5-Gallon kits	20 lbs. A, 40 lbs. B
55-Gallon kits	200 lbs. A, 400 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.