

F-50 A/B

55 SHORE A POLYURETHANE ELASTOMER

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.

- Rapid demolds
- Ideal for part production
- Very easy to use
- Excellent tear strength and toughness

PHYSICAL PROPERTIES	TEST METHOD	ELEVATED TEMPERATURE CURE*
Hardness, Shore A	ASTM D2240	55 ± 5
Density (g/cc)	ASTM D792	1.07
Cubic Inches per Pound	N/A	26.1
Color/Appearance	Visual	Transparent Pale Yellow
Tensile Strength (psi)	ASTM D412	845
Elongation (%)	ASTM D412	425
Tear Strength (pli)	ASTM D624	95
Shrinkage (in/in) linear	ASTM D2566 @ 1" depth	0.001

HANDLING PROPERTIES	Part A	Part B
Mix Ratio by weight	50	100
Mix Ratio by volume (cartridge dispense friendly)	46	100
Specific Gravity @ 77°F (25°C)	1.13	1.03
Color	Pale Yellow	Amber
Viscosity (cps) @ 77°F (25°C) Brookfield	550	850
Mixed Viscosity (cps) @ 77°F (25°C) Brookfield	930	
Work Time, 100 g mass @ 77°F (25°C)	7 – 8 minutes	
Gel Time	9 – 10 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).

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.

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	Part A	Part B	Cubic Inches per Kit
5-Gallon Kits	20 lbs.	40 lbs.	1,566
55-Gallon Drum Kits	200 lbs.	400 lbs.	15,660

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.

⚠WARNING: This product can expose you to chemicals including Butyl benzyl phthalate (BBP), which is known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.



Handling Guide