



# ST-1087 A/B

## 83 SHORE A FIRE RETARDANT POLYURETHANE ELASTOMER

### PRODUCT HIGHLIGHTS:

ST-1087 A/B is a castable modified polyurethane elastomer. ST-1087 A/B is useful in applications where a medium hard rubber-like product, with self-extinguishing properties, is required. Special product characteristics are:

- Does not contain MOCA, MDA, TDI or MDI
- Very easy to use; may be easily pigmented
- Cures at room temperature
- Good tear strength, toughness, and resiliency
- Excellent elongation and recovery
- Passes FAR 25.853 Flammability test

### TYPICAL PRODUCT USES:

- ◆ Mold fabrication
- ◆ Shock absorbent pads and liners
- ◆ Various types of urethane rubber parts
- ◆ Electrical potting and cable sealing applications
- ◆ Excellent as an adhesive for strong and resilient bonds

### PHYSICAL PROPERTIES:

Hardness, Shore A ASTM D-2240.....	83 ± 2
Density, (g/cc) ASTM D-792.....	1.08
Cubic Inches Per Pound .....	26.0
Tensile Strength, (psi) ASTM D-412.....	1,500
Elongation, (%) ASTM D-412.....	300
Tear Strength, (pli) ASTM D-624 .....	160
Shrinkage, (in./in.) linear ASTM D-2566.....	0.009
Flammability Test, FAR Part 25.853 (Vertical burn).....	passes

### HANDLING PROPERTIES:

Mix Ratio (by weight):

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

Mix Ratio (by volume):

Part A .....	100 parts by volume
Part B .....	55 parts by volume

Specific Gravity:

Part A .....	1.12
Part B .....	1.04

**HANDLING PROPERTIES (cont'd):**

Viscosity, (cps) @ 77°F (25°C) Brookfield:

Part A .....	3,900
Part B .....	1,060
Mixed .....	2,700

Work Time, (100-gram mass) @ 77°F (25°C)..... 20 minutes

Demold Time @ 77°F (25°C)..... 4 - 6 hours

Cure Schedule..... Full cure in 3 - 5 days or post cure parts 8 - 16 hours at 150° - 180°F (66° - 82°C)

**MOLD PREPARATION AND RELEASING:**

When ST-1087 A/B is used to reproduce molds from plaster models, or wood and other porous substrates, we would first recommend that substrate surfaces be sealed. Release agents may then be applied over the sealed surface.

**NOTE:**

Prolonged direct exposure to sunlight can affect the surface of this product. Cover molds or other products when storing outdoors. **The cure may be inhibited if cast against a tin catalyzed silicone RTV.**

**STORAGE:**

Store in a cool dry place. Unopened containers of ST-1087 A/B will have a shelf life of 6 months from date of shipment when properly stored under normal indoor conditions, i.e., 75° ± 15°F (24° ± 10°C). Open containers of material should be purged with dry nitrogen prior to replacing lids or caps to prevent moisture contamination.

**PACKAGING:**

1 Gallon kits.....	8 lbs. A, 4 lbs. B
5 Gallon kits.....	40 lbs. A, 20 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.**

NON-WARRANTY "Except for a warranty that materials substantially comply with the data presented in Manufacturer's latest bulletin describing the product (the basis for this substantial compliance is to be determined by the standard quality control tests generally performed by Manufacturer), all materials are sold "AS IS" and without any warranty express or implied as to merchantability, fitness for a particular purpose, patent, trademark or copyright infringement, or as to any other matter. In no event shall Manufacturer's liability for damages exceed Manufacturer's sale price of the particular quantity with respect to which damages are claimed."