

High Strength 3

Silicone Mold Making Rubber

Product Description:

Alumilite's High Strength 3 silicone mold making rubber is our most flexible silicone mold making rubber and is great for making molds of parts with deep undercuts or negative drafts. The High Strength 3's flexibility and high tear strength give it the ability to reduce seam lines by making one piece molds rather than multiple piece molds where seam line removal is critical. The High Strength 3 is a tin base silicone and cures against all different types of clay and substrate. The tin base silicone is a condensation cure and therefore temperature and humidity may affect the cure speed of the rubber. The High Strength 3 has a low viscosity which does not require degassing (always recommended when available) and will pick up the exact detail of your original.

Physical Properties:

Color	Pink or White
Mixed Viscosity (cps)	15,000
Hardness, (ASTM D-2240) Shore A	8-10
Specific Gravity	1.15
Shrinkage (in/in)	.0048
Tensile Strength (ASTM D-638) (psi)	400
Elongation (in/in)	575%
Temperature Range (Degrees F)	-67 to 395
Tear Strength (ppi)	115

General Properties:

Color	"A" Side - Base	White
	"B" Side - Catalyst	Clear or Translucent Pink
Mix Ratio		10:1 by wt.
Shelf Life		1 year
Open Time at 75 Degrees F (100g mass)		1 hour
Demold Time at 75 Degrees F (100g mass)		18 hours
Full Cure Schedule		7 days

	<u>Approximate Volume:</u>	
Packaging:	1 lb	Pint Kit
	5 lbs	½ gallon
	10 lbs	1 gallon
	50 lbs	5 gallon
	484 lbs	Drum

Storage: Store in a cool dry place. Unopened containers will have a shelf life of 6 months when properly stored at room temperature. Avoid high humidity areas and replace lids to containers as soon as you are finished using. If you are finished using the product for a period of time, purge opened containers with dry nitrogen or Alumilite's Bloxygen before re-sealing and storing.

Preparation:

Thoroughly clean and remove all dirt/contaminates. Make sure mold box and part are sealed to eliminate possibility of leakage or silicone wicking into the part. Mold release is required when pouring against another silicone if you do not want the two to bond, as when making two piece molds. Use Alumilite's UMR, Rubber to Rubber Mold Release, or a thin layer of Vaseline to avoid the two silicone pours from bonding to one another. Avoid contact with all porous materials such as fabric, clothing, carpet, and other non sealed materials.

Mix Instructions:

The proper mix ratio for Alumilite's High Strength 2 & 3 liquid silicones is 10:1 by weight. Use an accurate scale and measure out 10 parts of base to 1 part catalyst by wt. If you are using the 1 lb kit, use the 1 oz cups and scoop provided in the kit. Measure 1 SCOOP OF CATALYST for every 2 FLUID OUNCES OF BASE. Follow the instruction sheet provided with the kit. Read all MSDS and cautions on the bottle prior to using.