

G**T****P**

GT 5090

June 2006

High Strength Silicone RTV MoldMaking Rubber

****Cannot be used with GT-5235 Thixotropic Additive**

DESCRIPTION

GT Products® 5090 is a room temperature curing silicone rubber compound designed for the manufacture of flexible molds.

GT Products® 5090 features:

- Low viscosity
- High tear strength
- Low durometer
- Resistance to sulfur clays

GT Products® 5090 is supplied in matched kits with Catalyst 5090 designed to be used in a 10:1 ratio by weight.

MIXING

Because pigments can settle during storage, Catalyst 5090 should be thoroughly stirred before mixing. Use separate tools for mixing the base and catalyst to avoid cross contamination. Low-shear mixing of the mixture is recommended. Add the catalyst to the base and mix until the color is uniform. Use clean tools and scrape the bottom and sides of the container to assure a homogeneous mixture. Avoid stirring in an excessive amount of air.

TYPICAL PROPERTIES

	<u>Base</u>	<u>Catalyst</u>
Color	white	Red
Specific Gravity	1.12	0.98
Viscosity (cPs)	60,000	100
Mixed Viscosity	22000	
Pot Life (pour time)	60 –90 min.	
After cure (7 days @ 25°C)		
Tensile, psi:	425	
Elongation, %	550	
Durometer, Shore A	8	
Shore 00	55	
Tear(die B) minimum	150	
Linear shrinkage; %:	0.3-0.4	
Specific Gravity:	1.1	

DEGASSING

Air entrapped during mixing should be removed to prevent voids in the cured product. Deair the mixed material under a vacuum of 25 mm (29 inches) of mercury. The mixture will froth and, expand four times its volume, crest and recede to about the original level as the bubbles break. Degassing is usually complete about two minutes after frothing subsides.

CURING

GT Products® 5090 will cure sufficiently in 16 hours at room temperature (75°F) to be handled. GT 5090 will reach 90% of ultimate cure in 24 hours at room temperature. For full cure an additional 1-2 days at room temperature is required.

STORAGE and HANDLING

GT Products® 5090 will remain useful for six months when stored in the original unopened containers at temperatures below 80°F (27°C). Both GT Products® 5090 and catalyst-5090 are sensitive to moisture. Keep containers covered.

COMPATIBILITY

GT Products® 5090 is a condensation (“Tin catalyst”) cure system. It will cure in contact with most clean dry surfaces. GT Products® 5090 will cure in contact with materials such as butyl and chlorinated rubbers, sulfur-containing materials, amines and other condensation RTV silicones which would inhibit the cure of addition-cure RTV rubber.

GT Products® 5090 cannot be used in conjunction with GT-5235 Thixotropic additive.

NOTE

The above data is based on typical experience and should not be used for specification writing. Suitability of GT-Products® 5090 for a specific application should be determined under actual use conditions. No warranty, expressed or implied, is hereby made.

June 2006