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GT 5091

June 2006

High Strength Silicone RTV MoldMaking Rubber

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

DESCRIPTION

GT Products® 5091 is a room temperature curing silicone rubber compound designed for manufacturing flexible molds.

GT Products® 5091 features:

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

GT Products® 5091 is supplied in matched kits with Catalyst 5091 designed to be used in a 10:1 ratio by weight.

MIXING

Because pigments can settle during storage, Catalyst 5091 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	Blue
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:	500
Elongation, %	525
Durometer, Shore A	15
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® 5091 will cure sufficiently in 16 hours at room temperature (75°F) to be handled. GT 5091 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® 5091 will remain useful for six months when stored in the original unopened containers at temperatures below 80F (27°C). Both GT Products® 5091 and catalyst-5091 are sensitive to moisture. Keep containers covered.

COMPATIBILITY

GT Products® 5091 is a condensation (“Tin catalyst”) cure system. It will cure in contact with most clean dry surfaces. GT Products® 5091 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® 5091 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® 5091 for a specific application should be determined under actual use conditions. No warranty, expressed or implied, is hereby made.

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