



# GT 6166

## Silicone RTV

### MoldMaking Rubber

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#### DESCRIPTION

GT Products<sup>®</sup> 6166 is pourable two-component silicone rubber compound designed for making flexible molds.

GT Products<sup>®</sup> 6166 is recommended for repetitive production of intricate shapes cast in epoxy or urethane resins. It is also used for potting electronic components and protecting sensitive assemblies against thermal shock and vibration.

#### MIXING

Because fillers settle during storage, both GT Products<sup>®</sup> 6166 and catalyst 6166 should be thoroughly stirred before mixing together. Use separate tools for mixing the two components to avoid cross contamination. GT Products<sup>®</sup> 6166 base is mixed with catalyst 6166 in a 10 : 1 ratio by weight. Add the catalyst into the base to assure complete dispersion. Mixing may be done by hand with a spatula or by machine. When machine mixing avoid prolonged high speeds to prevent premature cure. Avoid stirring in an excessive amount of air. Complete mixing is indicated by a uniform red color.

#### TYPICAL PROPERTIES

	<u>Base</u>	<u>Catalyst</u>
Color	White	Blue
Specific Gravity	1.27	1.0
Viscosity (cPs)	36,000	1,000
Mixed Viscosity		30,000
Pot Life (pour time)		1 hr.
After cure (24 hr @ 25°C)		
Tensile, psi:		600
Elongation, %		425
Durometer, Shore A		25
Specific Gravity:		1.25
Tear Strength, Die B, ppi		100
Useful Temperature Range, °C (°F)		-60 – 232 (-75 – 450)

#### DEGASSING

Air entrapped during mixing should be removed to prevent voids in the cured product. Dearth the mixed material under a vacuum of 25 mm (29 inches) of mercury. The mixture will expand to about 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<sup>®</sup> 6166 will cure sufficiently in eight hours at room temperature (75°F) to be handled. It will reach 90% of ultimate cure in 24 hours at room temperature. For full cure an additional 1-2 days at room temperature or an elevated temperature cure is required.

### Typical Cure Times

75°F	24	hr.
100°F	95	min.
200°F	5	min.

## **STORAGE and HANDLING**

GT Products 6166 will remain useful for six months when stored in the original unopened containers at temperatures below 80°F (27°C).

## **COMPATIBILITY**

GT Products<sup>®</sup> 6166 is an addition (platinum catalyst) cure system. It will cure in contact with most clean dry surfaces. Certain materials such as butyl and chlorinated rubbers, sulfur containing materials, amines and condensation (metal soap catalyst) RTV silicones can cause cure inhibition. This inhibition will manifest itself as a sticky interface with the substrate. Inhibition can often be minimized by warming the substrate to evaporate contaminants, neutralizing and rinsing, or by the use of a suitable barrier. A sample patch test is recommended.

## **NOTE**

*The above data is based on typical experience and should not be used for specification writing. Suitability of GT-Products<sup>®</sup> 6166 for a specific application should be determined under actual use conditions. No warranty, expressed or implied, is hereby made.*

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