



## Technical Data Sheet

### GT-5091 High Performance Mold Making Silicone

GT Products® 5091 is a room temperature curing silicone rubber compound designed for the manufacture of flexible molds. This material has been designed to be used on basic shape patterns and low run molds.

#### GT-5091 Features

Low Viscosity

Resistance to Sulfur Based Clays

Low Durometer

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

#### Typical Properties

	Base	Catalyst
Color	White	Blue
Specific Gravity	1.12	0.98
Viscosity (cPs)	30,000	100
Mixed Viscosity	20,000	
Pot Life (Pour Time)		60-90 Minutes
<b>After Cure (7 days @ 25°C)</b>		
Tensile, psi:	450	
Elongation, %	375	
Durometer (Shore A)	15	
Tear (die B)	120	
Linear Shrinkage; %	0.3-0.4	
Specific Gravity	1.1	

#### Applications:

Hobby and art projects

Foundry, sculpture , and figurines

Candle and Soap Molds

Rapid Prototyping

Special Effects

Model Making

## **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. Accurate weighing is essential to obtain maximum physical properties from the cured silicone. Add the catalyst to the base and mix until the color is uniform. Low-shear mixing of the mixture is recommended. 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.

## **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 froth and expand to four times its original 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 (72°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 80°F (27°C).

Both GT Products® 5091 and catalyst-5091 are sensitive to moisture. Keep containers covered.

### **Accessories:**

ER-200 Mold Release

GT Products Silicone Pigments

CA-5275 Fast Catalyst

CA-5560 Ultra Fast Catalyst

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