



# Factor II, Incorporated

Inventing and Innovating...

(Information: 1.928.537.8387)

ONLINE ORDERING [www.factor2.com](http://www.factor2.com)

## PRODUCT INFORMATION VST Platinum Silicone Elastomer

### PRODUCT DESCRIPTION:

Factor II Inc. series of VerSiTal silicone elastomers. The VST line is a translucent two component, 10:1 mixing by weight, low viscosity, addition cure (platinum) RTV (Room Temperature Vulcanizing) Silicone Elastomer.

This line of VST elastomers is a new concept in silicone technology. This translucent material is available in various forms.

PRODUCT	CURE	SHORE A
VST-30	25-30 Min	23
VST-50	Overnight	30
VST-50F	2-3 hours	28
VST-50HD	Overnight	38

*Note: Base of all three VST-Silicone Elastomers is identical.*

*The Variable is in the Crosslinker.*

	<u>VST-30</u>	<u>VST-50</u>	<u>VST-50F</u>	<u>VST-50HD</u>
Translucent	Yes	Yes	Yes	Yes
Shore A	23	30	28	38
Cure Time RTV	25-30min	overnight	2-3 hours	overnight
Pot Life	10-13 min	90 min	30 min	2 hours
Tear Strength ppi	115	130	120	110
Tensile Strength psi	985	1035	1095	950
Elongation %	610	660	625	550
Viscosity A	12,000	12,000	12,000	15,000
Viscosity B	10,000	10,000	10,000	10,000

### MIXING:

1. Stir the base (PartA) well before use (except when machine dispensing).
2. Shake the catalyst container (PartB) well before use.
3. Weigh the desired amount of base into a clean mixing container. Tip the container and roll the base all the way around the sidewall up to two inches from the top. This will prevent the catalyst from becoming absorbed into the container. It is recommended that the container be filled to not more than 1/4 the container depth to allow sufficient room for expansion during the deairation procedure.
4. Weigh the proper amount of catalyst into the container.
5. Mix the base and catalyst together by stirring with a stiff, flat ended metal spatula until a uniform color is obtained. Scrape the container walls and bottom well to insure a thorough mix.If mechanical mixer is used, do not exceed 150 rpm.
6. Part A and Part B are mixed in a 10:1 ratio by weight. Care should be taken to minimize air entrapment during mixing. Vacuum deairation at 28 inches Hg is recommended. Apply vacuum to a container at least four times the volume of the material to avoid overflow of the bubbles. Allow the material to reach its' maximum capacity, and to fall to the bottom of the container. Continue to hold the vacuum for 3-5 minutes. This will eliminate the smaller bubbles. When packing the material into a mold care should be taken to minimize trapping air bubbles.



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7. Bleed air slowly into the vacuum chamber. When the chamber is at atmospheric equilibrium, remove the cover plate and take out the container.

## **PROCESSING INFORMATION:**

### **CATALYZED PROCESSING PROPERTIES ARE AFFECTED BY TEMPERATURE AND HUMIDITY VARIATION**

1. For best results mix and cure the material at 75°F (24°C) and 50% relative humidity.
2. Higher temperature and humidity will decrease the work life and pot life of the material. The faster cure will also affect the flow properties. Refrigeration of the base prior to use in hot environments has shown to improve the handling properties of this material.
3. Lower temperatures and humidity will increase the work life and pot life of the material. The slower cure will increase the flow time. Cure temperatures below 68°F (20°C) are not recommended and have been found to cause a reduction in final cure hardness and properties.

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