# Silanes & Silicones for Addition Curing System

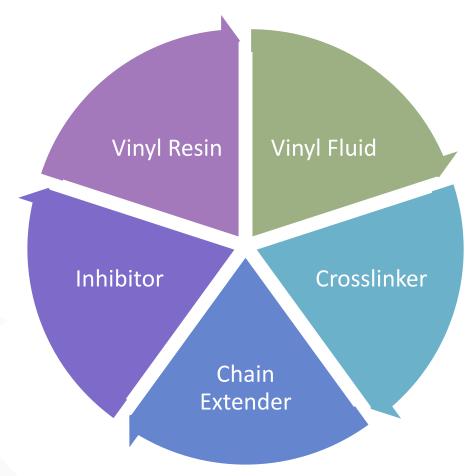


SiSiB SILICONES - A part of PCC group.

Your Reliable Partner in the Silicone Field!



## SiSiB® SILICONES for Addition Curing System





### SiSiB® SILICONES for Addition Curing System

### Vinyl Fluid

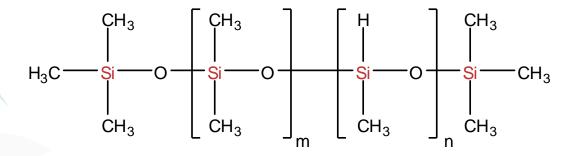
SiSiB<sup>®</sup> VF6030- Vinyl end-capped Polydimethylsiloxane *Different viscosity from 20cSt to 165000cSt.* 

$$H_2C = CH - SI - O - SI - O - SI - CH_3$$
 $CH_3 - CH_3 - CH_2$ 
 $CH_3 - CH_3 - CH_3$ 
 $CH_3 - CH_3$ 
 $CH_3 - CH_3$ 



#### Crosslinker

SiSiB® HF2050- Methyl Hydrogen Silicone Fluid

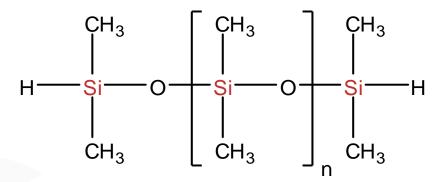


Si-H functional silicone fluid with different viscosities and Si-H content are used as crosslinker for RTV-2, LSR, HTV or in synthesis.



#### Chain Extender

SiSiB® HF2030- Hydrogen Terminated Dimethyl Silicone Fluid



Si-H end-capped silicone fluids with different viscosities and Si-H content can be used as chain extender. This is beneficial in aiding the formulator by building molecular weight of the linear vinyl fluids in-situ during the curing reaction.



#### Inhibitor - SiSiB® PC9401

1,1,3,3-Tetramethy-1,3-divinyldisiloxane

$$H_2C$$
 —  $CH_3$  —  $CH_3$  —  $CH_3$  —  $CH$  —  $CH_2$  —  $CH_3$  —  $CH_3$  —  $CH_3$  —  $CH_3$ 

PC9401 is used as a linear inhibitor in the formulating of two-part Silicone RTV-2 Addition- Curing systems. Because of the large vinyl content (10.75 mmole/gm), small amounts are very effective in retarding and controlling the working time or pot life of two-part Addition-Curing Silicone RTVs. Also, due to its boiling point of 139°C, it is easily volatilized during curing.



### SiSiB® SILICONES for Addition Curing System

#### Inhibitor - SiSiB® PC9110

2,4,6,8-tetramethyl-2,4,6,8-tetravinyl-cyclotetrasiloxane

PC9110 is a very effective inhibitor for a platinum catalyzed addition-curing two-part RTV. When used as an inhibitor, PC9110 is normally added to the crosslinker part of the formulation. Its high boiling point and low evaporation rate provides and extremely stable working time at ambient temperatures of the formulated two-part RTV.



#### Hydrophilic Fumed Silica

Fumed Silica	BET surface area [m2/g]	Loss on drying [wt.%]	pH value
SiSiB® FS0150	150 +/- 15	Max. 1.0%	3.6-4.3
SiSiB® FS0200	200 +/- 15	Max. 2.0%	3.6-4.3

#### SiSiB® PC9210 HMDZ

It can be used as hydrophobing agent for fumed silica.

$$\begin{array}{c|cccc} CH_3 & CH_3 \\ & & \\ & H_3C & \\ Si & N & Si & CH_3 \\ & & \\ CH_3 & CH_3 & \\ \end{array}$$



#### **SISIB SILICONES**

#### A part of PCC group

- PCC group is established in 1989.
- With over 26 years experience, now PCC/SiSiB is one of the leading professional silicone material producers.
- PCC have 7 joint ventures (factories) for silicone related.
   One major intermediates production site for upstream applications and six downstream production units.
- Annual capacity:

30,000 tons organosilanes.

15,000 tons silicone fluids.

23,000 tons silicone rubbers.

10,000 tons fumed silica.