# Which Inhibitor to choose?

Inhibitor 600, DVS and MVC are additives for platinum catalyzed addition curing silicones to moderate their crosslinking rate. Inhibitor 600 is a solution of an alkynol in Polymer VS, whereas Inhibitor DVS is pure divinyl tetramethyl disiloxane and Inhibitor MVC is pure methyl vinyl cyclotetrasiloxane.

# R R OH Si Si Si Si Si Inhibitor MVC Inhibitor MVC

#### Inhibitor 600

For long potlives (hours to days) followed by a quick full cure ("Snap Cure") Inhibitor 600 is ideal. However, the absolute potlife can shorten over time by evaporation effects of this volatile inhibitor. So open storage of the formulated components and curing conditions (time, temperature, ventilation) have to be well-controlled.

For sensitive applications (e.g. medical products) heat curing or a post curing step is recommended to remove all inhibitor residues or preferably to work with Inhibitors DVS or MVC.

Inhibitor 600 is to be added only to the SiH-containing component (typically Part B).

### Inhibitor DVS

Inhibitor DVS has a medium volatility so formulations can be handled comfortably without significant evaporation effects, i.e. shortening of potlife. DVS fully reacts into the silicone network without leaving any side products. It has only little influence on the network density and therefore allows potlife adjustments without stronger side effects on the mechanical performance.

#### Inhibitor MVC

Inhibitor MVC has the lowest volatility and thus ensures the best potlife stability over storage time. It fully reacts into the silicone network without leaving any side products. Due to its tetrafunctional structure it increases network density an thus influences the mechanical properties. Therefore both dimensions, mechanics and potlife, have to be simultaneously adjusted in a stepwise optimisation.



