

Modifier 700 series

Chain extender for vinyl-functional silicone polymers

Modifier 705 and Modifier 715 are SiH-terminated polydimethyl siloxanes which are used as plasticizers in addition-curing silicones. Due to their difunctional structure, these products do not react by cross-linking, but by extending the chains of vinyl-terminated silicone polymers (Polymer VS). Use of the modifiers reduces the crosslinking density and therefore the elastomer hardness.

Technical data (no specification)

Product name	SiH content [mmol/g]	Viscosity at 25 °C [mPas]	Refractive index n_D^{20}
Modifier 705	0.16	500	1.4050
Modifier 715	3.40	3	1.3970

Technical data (no specification)

Property	Unit	
Appearance		clear, colorless liquid
Density (20 °C)	[g/cm ³]	approx. 1

Application

Use of the modifiers allows obtaining products with a low Shore hardness, even when using low-viscosity vinyl polymers. These modifiers are therefore used in formulations that have a low viscosity prior to crosslinking and should have low Shore hardness after crosslinking. Another important modifier application is the formulation of silicone gels.

When working with two-component silicone formulations, it must be ensured that Pt-catalyst (e. g. Catalyst 500 series) and modifier are kept strictly apart.

Further information about the formulation structure is available upon request.

Packaging and Storage

Packaging	190 kg drum, 900 kg IBC PE
Shelf life	24 months in originally sealed containers
Storage	Dry, up to 30 °C (86 °F) in sealed containers, do not permanently expose to intensive sunlight

Safety and Handling

The rules and regulations for the handling and use of chemicals have to be observed. Please refer to the Material Safety Data Sheets for further details.

Attention must in particular be paid to the fact that silicones containing SiH may generate hazardous hydrogen gas in connection with certain pollutants. For further information, please consult e. g. www.silicones-safety.com.

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