

Technical Information

Crosslinker OX

Oxime silanes

Crosslinker OX are oxime silane-based crosslinkers for producing neutral moisture-curing silicone sealants. Using these silane compounds, hydroxy-functionalized silicone polymers are crosslinked to obtain a silicone elastomer under the effect of a catalyst and moisture. When using Crosslinker OX, no acetic acid or amine is released in contrast to acid or alkaline crosslinking systems, but 2-butanone oxime. As this cleavage product reacts neutrally, sealing compounds based on Crosslinker OX can be used even on sensitive substrates such as marble

Technical data (no specification)

Product name	Composition	Appearance, Colour
Crosslinker OX 10	MOS	clear, colorless to yellowish
Crosslinker OX 20	VOS	clear, colorless to yellow
Crosslinker OX 32	VOS/TOS 65/35	yellowish to brownish liquid crystallization of TOS is possible at temperatures below 45 °C ⇒ precipitate
Crosslinker OX 33	VOS/TOS 82/18	yellowish to brownish liquid crystallization of TOS is possible at temperatures below 45 °C ⇒ precipitate

Technical data (no specification)

Property	Unit	
Refractive index n_D^{20}		1.455 - 1.483
Density (20 °C)	[g/cm ³]	0.98

Application

Crosslinker OX is used in sealants, usually at concentrations of between 4 and 6 wt%. The various Crosslinker OX differ by their reactivity, with the general rule being:

TOS > VOS > MOS

Mixing different Crosslinker OX types enables setting the rate of a formulation precisely, i. e. skin-over time, curing rate and time to first elastic recovery.

Registration status

The ingredients of all above mentioned Crosslinkers are listed in the following chemical inventories:

EINECS/ELINCS, TSCA, DSL, ENCS, AICS, TCCL, PICCS, IECSC, New Zealand, TCSI

Further information is available on request.

Packaging and Storage

Packaging	190 kg steel drum, 950 kg IBC PE
Shelf life	9 months in originally sealed containers
Storage	Dry, up to 86°F (30°C) 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.

For all oxime crosslinkers

In view of the high reactivity, the containers should be protected against moisture when opening, e. g. by using gas-displacement systems and/or by applying a blanket of dry air or dry inert gas.

For the TOS-containing products Crosslinker OX 32, OX 33

Dissolving of a possible TOS precipitate: Overnight storage at 60 – 70 °C in a heat chamber followed by homogenization. Further processing (metering, pumping) is recommended at T > 45 °C.

05/20

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