

# 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 specifications)

Product name	Composition	Appearance, Color
Crosslinker OX 10	MOS	clear, colorless to yellowish
Crosslinker OX 20	VOS	clear, colorless to yellow
Crosslinker OX 30	TOS/Toluene 40/60	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	

### Technical data (no specification)

Property	Unit	
Refractive index $n_D^{20}$		1.455 – 1.483
Density (20 °C)	[g/cm <sup>3</sup> ]	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:

$$\text{TOS} > \text{VOS} > \text{MOS}$$

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.

## Packaging and Storage

Packaging	190 kg steel drum, 950 kg IBC PE
Shelf life	9 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.

### 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.

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