

WACKER® Silicate MKS

Ethyl Silicates

WACKER® Silicate MKS is an ethyl silicate binder suitable for the formulation of one-pack ethyl silicate zinc-rich primers. These primers are excellent anti-corrosive coatings.

Properties

WACKER® Silicate MKS offers these advantages:

- ready-to-use binder, no further chemical hydrolysis required
- developed for the formulation of storage-stable one-pack zinc rich primers
- Product offers outstanding anti-properties, added zinc dust can be easily stirred up
- moisture-curing

Technical data

General Characteristics

Property	Condition	Value	Method
Appearance	-	slightly cloudy, thixotropic liquid	-
Density	20 °C	approx. 0.94 g/cm ³	DIN 51757
Diluent	-	miscible with low-boiling aliphatic and aromatic solvents	-
Flash point	-	7 °C	ISO 3679
SiO ₂ -content	-	approx. 20 %	-
Viscosity, dynamic	25 °C	50 - 90 mPa·s	DIN 53019

These figures are only intended as a guide and should not be used in preparing specifications.

All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

Store in a dry and cool place.

Protect against moisture.

Applications

- Anti-Corrosive Coatings
- Marine & Protective Coatings
- Industrial Coatings

Application details

WACKER® Silicate MKS is a binder with outstanding antisetting properties. Paints formulated with it are easy to stir up even if they have been stored for a long time.

Once a coating has been applied, it will cure under the influence of atmospheric moisture and can be easily overpainted with any standard paint.

To prepare a ready-to-use zinc-rich paint, add the additives and zinc dust in that order to WACKER® Silicate MKS dispersing them with a high-speed mixer. Solvents can be used to adjust the desired SiO₂ content or the desired viscosity of the formulation. Add the solvents while the stirrer is at low speed. The temperature of the premix should not be higher than 40°C.

It is also important that the added components do not introduce uncontrolled amounts of water into the system as this would adversely affect the processing time / shelf life of the formulation.

Once the zinc-rich paint has been applied, it must be fully exposed to atmospheric moisture (approx. 50% r. h.). The binder will then hydrolyze and cure very rapidly to produce a hard coating.

Zinc-rich paints based on WACKER® Silicate MKS may be used as primers or on their own. They protect steel from corrosion:

- in aggressive industrial and coastal atmospheres

- at high temperatures (up to 420°C)
- in the presence of chemicals

Packaging and storage

Packaging

- 25 kg steel can
- 180 kg steel drum

Storage

WACKER® Silicate MKS must be stored in the tightly closed original container under exclusion of moisture.

The "Best use before end" date of each batch is shown on the product label.

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site <http://www.wacker.com>.

QR Code WACKER® Silicate MKS



For technical, quality or product safety questions, please contact:

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