

# WACKER SILIKAT TES 40 WN

Ethyl Silicates

## Characteristics

Wacker Silicate TES 40 WN is a mixture of monomeric and various oligomeric and cyclic condensates of ethyl silicate. The average chain length is approximately 5 Si-O units. The reactive silicon dioxide (silica) content is approximately 41 %.

## Special characteristics

Wacker Silicate TES 40 WN contains many hydrolyzable ethoxy groups. For applications in which the inorganic SiO<sub>2</sub> is to be used as a binder, Wacker Silicate TES 40 WN needs to be activated (see processing).

## Application

Wacker Silicate TES 40 WN can be used as:

- binder for refractory fillers (production of ceramic shells and cores)
- binder for zinc-rich (anticorrosion) paints
- coating material for pigments and fibers
- source of finely divided silica
- crosslinking agents
- chemical intermediates

## Processing

Wacker Silicate TES 40 WN is activated by:

- partial hydrolysis with alcoholic solvent and acid, for example sulfuric acid
- mixing with a catalyst, for example amine or titanates

## Storage

Wacker Silikat TES 40 WN has a shelf life of at least 24 months when stored in originally sealed containers and kept away from moisture. The 'Best use before end' date of each batch appears on the product label.

## Product data

Appearance		colorless, clear
Color	APHA	max. 20
Density at 20 °C, approx.	[g/cm <sup>3</sup> ]	1.06
Silica content, approx.	[%]	41
Acidity	[mg/kg]	max. 10
Hydrolyzable chloride	[mg/kg]	max. 10
Flash point	[°C]	> 62

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

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 information

Detailed safety information is contained in each Material Safety Data Sheet, which can be obtained from our sales offices.

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The data presented in this leaflet are in accordance with the present state of our knowledge, but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the products for a particular purpose.

The management system has been certified according to DIN EN ISO 9001 and DIN EN ISO 14001

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

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