

GENIOSIL[®] CS 2



Organofunctional Silanes

Silane Preparation

Properties

GENIOSIL[®] CS 2, when used as a component of organic/inorganic composites, improves the adhesion between the organic polymer and the inorganic fillers used. This imparts significantly improved flexural strength and impact strength to the composites. It also reduces water absorption and dirt pick-up significantly. GENIOSIL[®] CS 2 also liberates about 50 % less methanol than conventional adhesion promoters. GENIOSIL[®] CS 2 is an unsaturated alkoxy silane. It's a clear, colorless liquid with a characteristically aromatic odor. It hydrolyzes in the presence of moisture under liberation of alcohol to form silanols, which can then react with themselves to form siloxanes. Having both silyl and unsaturated organic groups, GENIOSIL[®] CS 2 is able to function as a molecular bridge between organic and inorganic substrates.

Technical data

General Characteristics

Property	Condition	Value	Method
Boiling point	1013 hPa	163 °C	EU-GL.A.2
Density	20 °C 1013 hPa	0.985 g/cm ³	DIN 51757
Flash point	-	50 °C	DIN 51755
Ignition temperature	-	255 °C	DIN 51794
Viscosity, kinematic	25 °C	1.29 mm ² /s	DIN 51562

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.

Applications

- Construction Materials
- Silanes for Composite Stone

Application details

1. General processing information

GENIOSIL® CS 2 dissolves readily in standard organic solvents, but is practically insoluble in neutral water. GENIOSIL® CS 2 hydrolyzes in acidified water (pH approx. 4 - 5) to silanols, the diluted solutions of which remain stable for some time.

2. GENIOSIL® CS 2 in Composites

To modify organic/inorganic composites, 1 to 3 % GENIOSIL® CS 2 is added to the organic resin along with conventional additives, such as peroxide and accelerator. The final products can then be manufactured in the usual way with conventional equipment.

GENIOSIL® CS 2 is principally used in the production of unsaturated polyester resin or polyacrylate composites to increase mechanical strength.

GENIOSIL® CS 2 acts as a coupling agent by forming a chemical bridge between the organic resin and the inorganic fillers or pigments used, e.g. quartz, granite or even glass.

Packaging and storage

Storage

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 GENIOSIL® CS 2



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

Wacker Chemie AG, Gisela-Stein-Strasse 1, 81671 Munich, Germany
productinformation@wacker.com, www.wacker.com

The data presented in this medium 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 medium 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 information provided by us does 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 product for a particular purpose.