

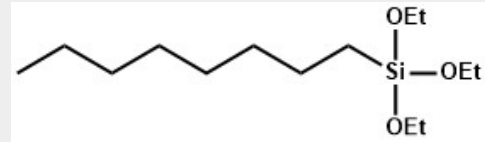
# GENIOSIL<sup>®</sup> NOTE



## Silanes

n-Octyltriethoxysilane

GENIOSIL<sup>®</sup> NOTE is a colorless liquid with an unspecific odor.



CAS No. 2943-75-1 | Empirical formula  $C_{14}H_{32}O_3Si$  | Molecular weight 276,49

## Properties

GENIOSIL<sup>®</sup> NOTE is an n-alkylalkoxysilane and slowly reacts with moisture under formation of the alcohol and the corresponding silanol. By condensation on inorganic surfaces hydrophobization or compatibilization with hydrophobic polymers can be achieved.

GENIOSIL<sup>®</sup> NOTE is for example used in the hydrophobization of concrete:

After application to the concrete, GENIOSIL<sup>®</sup> NOTE reacts with the atmospheric moisture and pore water in the concrete, thereby generating the active ingredient while liberating alcohol. The active ingredient greatly lowers the water absorbency of the treated concrete, which nevertheless retains a very high degree of water vapour permeability since neither pores nor capillaries are clogged.

Treatment with GENIOSIL<sup>®</sup> NOTE leads to

- significant reduction of chloride and water absorption by concrete
- reduced loss of concrete due to freeze / thaw action in the presence of de-icing salt
- high resistance to alkaline substances

## Technical data

### General Characteristics

Property	Condition	Value	Method
Purity	-	> 96 %	-

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

- Adhesives
- Building & Construction Adhesives
- Chemical Industry
- Composites
- Concrete Protection
- Industrial Adhesives
- Industrial Coatings
- Infrastructure
- Primers for Paints & Coatings
- Sealants
- Thermoplastics & Elastomers

## Application details

### 1. General processing information:

GENIOSIL® NOTE is highly miscible with standard organic solvents such as ethers and hydrocarbons.

Mixing with alcohols other than ethanol leads to a slow autocatalytic exchange of alkoxy groups until the system reaches thermodynamic equilibrium. This exchange is accelerated in the presence of acidic or basic substances

GENIOSIL® NOTE is almost insoluble in neutral water.

### 2. Application of GENIOSIL® NOTE as water-repellant impregnating agent:

GENIOSIL® NOTE is recommended as a water-repellent impregnating agent and primer for normal and reinforced concrete for bridges, roads and buildings.

Liberally apply two coats (wet-on-wet) of the impregnating agent uniformly to the concrete. Two coats are needed to ensure that all of the surface is covered. Do not allow puddles to form. Apply with a low-pressure pump, allowing impregnating agent to flood over the surface. For even distribution use a roller afterwards.

- Allow fresh concrete at least two weeks - preferably four - to set before impregnating it, to ensure that the cement sets properly.
- Remove coarse particles and dust from new, unsoiled surfaces with a brush or compressed air. Use superheated steam to clean weathered surfaces that are heavily soiled with oil, abraded rubber, etc., prior to treatment.

- Only impregnate concrete that has a uniformly dry surface with no damp patches. An equilibrium in humidity with the outside air is reached, when a freshly produced surface of fracture is not turning lighter in appearance (due to drying). No darkening of concrete or condensation may occur over night underneath a PE film (500 mm x 500 mm) attached to the concrete at its edges.
- Should it suddenly start to rain, stop treatment and cover the impregnated areas.

GENIOSIL® NOTE should not get into direct contact with bitumen. The resistance of thermal insulating materials against GENIOSIL® NOTE has to be determined.

## Packaging and storage

### Packaging

Information on available container sizes is obtainable from WACKER subsidiaries.

### 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.

Registration (selected countries / regions)

Listed on or in accordance with the following inventories:

EINECS – Europe

ECL – Korea

ENCS – Japan

AICS – Australia

IECSC – China

DSL – Canada

PICCS – Philippines

TSCA – USA

## 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® NOTE



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

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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.