

SiSiB® WR5902 N-Octyltriethoxysilane Oligomer

INTRODUCTION

SiSiB® WR5902 is an oligomeric n-octyltriethoxysilane designed for hydrophobic treatment of mineral and cement-based substrates. It penetrates into porous surfaces and, after hydrolysis and condensation, forms a durable hydrophobic network within the capillary structure. Compared with monomeric silanes, its oligomeric structure helps reduce volatility while maintaining good water-repellent performance.

FEATURES & BENEFITS

- Deep penetration into porous mineral substrates
- Long-lasting water repellency
- Reduced water absorption and capillary uptake
- Non-film-forming; helps maintain substrate breathability
- Good resistance to alkaline cement-based environments
- Lower volatility than monomeric alkyltrialkoxysilanes

PHYSICAL PROPERTIES

Color and	Colorless to light yellow
Appearance	Clear liquid
Density (25°C)	0.905-0.945
Refractive Index (25°C)	1.426-1.436
Viscosity (25°C, cSt)	5.0-20.0
Ash content (as SiO ₂ , 1000°C)	24-30%

These values are typical and are not intended for use as specifications.

APPLICATIONS

SiSiB® WR5902 is recommended for the water-repellent treatment of concrete, cement mortar, masonry, brick, natural stone and other porous mineral substrates. It is suitable for surface impregnation systems, solvent-based penetrating sealers, and hydrophobic treatment formulations where reduced water absorption, improved durability and reduced staining or efflorescence are required.

USAGE GUIDELINES

SiSiB® WR5902 can be used as supplied or diluted with suitable organic solvents, depending on the required active content, substrate porosity and application method. It should be applied to clean, dry and absorbent surfaces by spray, roller, brush or low-pressure impregnation. Laboratory testing is recommended to determine the optimum dosage, penetration

SiSiB® WR5902 N-Octyltriethoxysilane Oligomer

depth and surface appearance. Moisture should be avoided during storage and formulation, as alkoxy silanes may hydrolyze in the presence of water and release ethanol.

PACKING

SiSiB® WR5902 is supplied in 20Kg pail, 180Kg steel drum or 900Kg IBC tote.

STORAGE

SiSiB® WR5902 should be stored under dry conditions, away from direct sunlight. When stored at or below 40°C in the unopened original container SiSiB® WR5902 has a shelf life of at least 12 months.

Storage beyond the date 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.

HANDLING

This document does not contain the product safety information required for safe use. Before handling, please refer to the product and safety data sheets, as well as container labels, for information on safe usage, physical hazards, and health risks. Safety Data Sheet is available on the website, from the distributor, or by contacting SiSiB customer service.

NOTE

All information in the leaflet is based on our present knowledge and experience. We reserve the right to make any changes according to technological progress or further developments. Performance of the product described herein should be verified by testing.

We specifically disclaim any other express or implied warranty of fitness for a particular purpose or merchantability.

We disclaim liability for any incidental or consequential damages.