



Silanil 258

3-Glycidoxypropyltrimethoxysilane

Description

SILANIL 258 is an epoxy silane which contains reactive glycidoxy and methoxy groups.

Application

SILANIL 258 possesses both organic and inorganic reactivity that allows it to react with or "couple" organic polymers and inorganic surfaces. This dual reactivity should be considered when using **SILANIL 258** in specific applications. **SILANIL 258** is particularly recommended as:

- Treatment on glass fiber for use in reinforced areas.
- Treatment on mineral surfaces for use in mineral filled plastics
- Adhesion promoter to enhance bonding of a polymer coating or adhesive to glass.

Features

- Organic and inorganic reactivity
- Improves adhesion
- Increases composite strength properties
- Increased composite wet and dry tensile strength and modulus
- Increased composite wet and dry flexural strength and modulus
- Increased wet and dry compressive strength

Benefits

- Better appearance
- Better filler wet-out and dispersion
- Lower viscosity of filled liquid resins
- Improved processability

Typical Data

Parameter	Unit	Value
Appearance		Clear liquid
Specific gravity at 25°C		1.07
Refractive index at 25°C		1.42
Flash point, closed cup	°C	> 101 °C
Purity	%	98
Molecular Weight		236
Viscosity at 25°C	cSt	3

How to Use

SILANIL 258 can be applied in inorganic surfaces, as a dilute aqueous solution (0.1 to 0.5% silane concentration). Aqueous solutions are prepared by adjusting the pH of the water from 3.5 to 4.5 with about 0.1% acetic acid and then adding the silane and stirring. After adding the silane to the acidified water, it is necessary to stir the mixture for about 15 minutes before it hydrolyses and forms a clear homogeneous solution. Higher concentrations of **SILANIL 258** in water are not stable indefinitely and after standing several days may deposit an oily phase of condensed polysiloxane. **SILANIL 258** can also be applied as a solution in many common organic solvents.

