

# Silane USi-2301

Epoxy functional organosilane

## Product Description

Chemical Name:

$\gamma$ -Glycidoxypropyltrimethoxysilane

Synonym: Glymo;

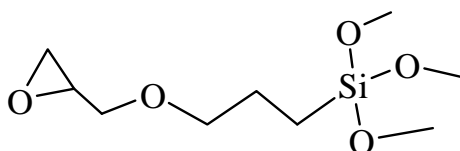
Glycidyl 3-(trimethoxysilyl)propyl ether;

[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane

CAS NO.: 2530-83-8

EINECS NO.: 219-784-2

Chemical structure:



## Properties

The use of USi-2301 as a coupling agent in mineral-filled plastics improves filler dispersibility, reduces its sedimentation tendency and greatly lowers the resin's viscosity. In addition, it leads to higher filler loading and a marked increase in water (vapor) resistance, as well as resistance to acids and bases. As a component of adhesives and sealants,

USi-2301 improves both adhesion to the substrate and mechanical properties such as flexural strength, tensile strength and modulus of elasticity.

## Typical Technical Data

The below values are not intended for use in preparing specifications. Please confirm with us prior to writing specifications on this product.

Appearance: Colorless transparent liquid

Colour (Pt-Co): 25 max

Specific Gravity ( $\rho_{20^\circ\text{C},\text{g}/\text{cm}^3$ ): 1.060 ~1.075

Refractive Index ( $n_D^{25^\circ\text{C}}$ ): 1.4275~1.4300

Purity (by GC, %): 98.0 min

## Applications

Silane USi-2301 is an essential ingredient in many industries. Examples are:

- Glass fiber or glass fabric composites:  
As a finish or a size ingredient
- Foundry resins:  
As an additive to polyurethane resin
- Sealants and adhesives:  
As a primer or additive
- Mineral-filled polymers (composites):  
For pretreatment of fillers and pigments or as an additive to the polymer
- Paints and coatings: As an additive and primer for improving adhesion to the substrate, especially glass and metal
- Improved shelf life over amino silanes in polyurethanes

## **Safety & Storage**

Customers should review the latest MSDS and label for product safety information, safe handling instructions, personal protective equipment if necessary, and any special storage conditions required for safety. MSDS is available at [www.usi-chemical.com](http://www.usi-chemical.com) or upon request.

Keep away from heat and open flame.  
When stored at or below 25 °C in the original unopened containers, this product has a usable life of 12 months from the date of production.

## **Packaging**

In 25kg, 200kg drum and 1000kg IBC

## **Contact Information**

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