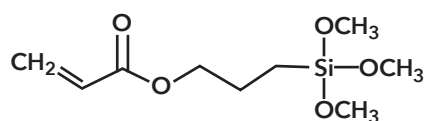


ElectroSil™ SSE50 Silane Coupling Agent

Product Description

ElectroSil SSE50 silane is a great candidate to use as an acrylate functionalized coupling agent, offering outstanding adhesion between inorganic or metal surfaces with a range of electronic grade resins with unsaturated bonds, such as, polyphenylene ether (PPE), bismaleimide, hydrocarbon resin, etc. Its high reactivity typically enables more efficient bonding with resins than other conventional methacrylate-based or vinyl-based silanes. Its high-water solubility may improve processability, such as, sizing formulation's stability and shelf life.

The molecular structure of ElectroSil SSE50 silane is:



Key Features and Typical Benefits

- High reactivity
- High condensation density at inorganic or metal surfaces
- High bonding efficiency and interfacial strength
- High water solubility and solution stability

Typical Physical Properties⁽¹⁾

1. Appearance	Liquid
2. Color	Colorless
3. Purity	>=98.5%
4. Density, 25 °C	1.06 grams/cm ³
6. Flash Point ⁽²⁾ , Closed Cup	123 °C

(1) Typical properties are average data and are not to be used as or to develop specifications.

(2) ASTM Method D56

Potential Applications

- Surface treatment for fiberglass cloth and copper foil
- Surface treatment for fillers, such as, silica, alumina
- Additive to resins and UV curable coatings

General Considerations for Use

For surface treatment, ElectroSil SSE50 silane can be hydrolyzed first in DI water to prepare a sizing formulation (~pH 4, using acetic acid), then treat fiberglass cloth, copper foil, etc.; ElectroSil SSE50 silane can also be applied directly onto inorganic surfaces, e.g., silica or alumina filler.

For resins and UV curable coatings application, ElectroSil SSE50 silane coupling agent can be directly added into the resin formulation at desired amount.

Availability

ElectroSil SSE50 silane is available in pail and drum quantities.

Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

Product Safety, Handling and Storage

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products.

SDS are available at www.momentive.com or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

Limitations

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

Customer Service Centers

For additional information, please contact our Customer Service Team

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