

Silquest™ G-170

Description

Silquest G-170 silane is a proprietary vinyl-functional silane coupling agent which can substantially reduce the volatile alcohol byproducts during the manufacture of wire and cable (W&C) jacketing.

Silquest G-170 silane has been shown to promote adhesion between unsaturated resins, polyolefins or rubbers and inorganic substrates including fiberglass, silica, siliceous fillers, pigments and many metal oxides.

This vinyl silane is an excellent candidate to consider for the manufacture of EPDM cross-linked low and medium voltage W&C jacketing, for lessening the environmental impact of methyl cellosolve emissions that are by-products of alternative products.

Key Features and Benefits

- Adhesion of organic polymers to inorganic fillers, halogen-free flame retardants, pigments or metal surfaces.
- Improves the electrical and tensile strength properties of ethylene/propylene/diene rubber and polyethylene resins after wet-conditioning, especially important for wire and cable applications.
- Enhances the strength of cured, glass fiber or filled reinforced polyester resin composites, especially after wet-conditioning.
- Lowers volatile organic content (VOC's) during use.

Typical Physical Properties

Appearance	Clear Liquid
Color	Light Straw
Acidity as Chloride, ppm	1
Solubility Hatch Number, NTU	6.0
Flash Point, °C (°F)	120 (248)

Applications

Silquest G-170 silane is a coupling agent useful in glass- fiber reinforced polyester resin.

As a coupling agent, Silquest G-170 silane is suited for direct addition to kaolin-filled EPDM rubbers used in wire and cable jacketing.

As a pretreatment for particulate HFFR fillers, such as magnesium dihydroxide or aluminum trihydrate, Silquest G-170 silane is used in HFFR compounds based upon polyolefins, EPDM rubber or other resins.

Soluble in toluene, xylene, acetone and many alcohols. Reacts with water especially if the pH of the water is adjusted to 3-4.

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.

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