



Technical Data

PRIMARY MC 162 Mercaptopropyltrimethoxysilane

CAS# 4420-74-0

PRODUCT DESCRIPTION

Primary MC 162 mercapto silane is a bifunctional additive that enhances the performance of a variety of polymer formulations. A thiol group allows it to react with many organic polymers. At the opposite end of the molecule, trimethoxysilane enables bonding to many inorganic materials. The resultant coupling between organic and inorganic can impart dramatically improved bonding between polymer and inorganic filler and improve wet and dry adhesion of the product to inorganic substrates. Physical properties are typically enhanced dramatically.

PROPERTIES

Property	Value
Appearance*	clear, nearly colorless liquid
Purity*	95% minimum
Refractive index*	1.440-1.445
Specific gravity*	1.020-1.060
Boiling point °C / °F	212 / 414
Flash point °C / °F	88 / 190
Molecular weight	196

* Specification

APPLICATIONS

Use MC 162 where organic resins and inorganic surfaces come into contact. Resins subject to coupling are rubber, polysulfide, and other. Inorganic materials coupled are talc, silica, glass, ceramic (including microspheres), many metals, and others.

SUGGESTED APPLICATIONS:

- Pretreatment of inorganic pigments used in polysulfides and rubber products,
- Pretreatment of glass fiber and wire to be used in glass composites, polysulfide caulks, and rubber products,
- Improvement of anticorrosive properties of coatings through enhanced adhesion,
- More complete dispersion and viscosity reduction of certain pigment dispersions, and
- Priming of metals, glass, and other inorganic substrates.

USE LEVELS

Use MC 162 at 0.5 to 2.0% as a pigment treatment or formulation component. Addition at the point of application may provide optimum properties.

When used as a primer, 0.1 to 0.5% in the appropriate solvent should provide optimum adhesion and physical properties.

QUALITY

MC 162 is produced for Primary Silane under ISO and DIN quality systems. Purity is guaranteed. Service is superior.

PACKAGING

MC 162 is available in 20 kg pails and 200 kg drums. Sample size is 0.5 kg. Shelf life of unopened containers is one year or more from date of manufacture when stored at or below 25°C and away from sunlight.

SAFETY AND HANDLING

Before using MC 162, read the MSDS. Always wear personal protective gear appropriate to the situation. Dispose spilled or unused material in compliance with federal, state, and local regulations.

WARRANTY

The above information is believed correct and is for evaluation purposes only. Customer is required to have a thorough evaluation of this product performed by a qualified individual for suitability prior to use. Statements in this technical data sheet, other literature, or by employees of Primary Silane do not relieve the customer of the need to test incoming material. Warranty is limited to the replacement of defective material.