

IOTA-792 N-(2-aminoethyl)-3-aminopropyltrimethoxysilane

Molecular Formula: $\text{NH}_2(\text{CH}_2)_2\text{NH}(\text{CH}_2)_3\text{Si}(\text{OCH}_3)_3$

CAS NO. : 1760-24-3

Silane IOTA-792 finds use as an:

Adhesion promoter in polysulfide, polyvinyl chloride plastisol, silicone two-part urethanes and epoxy adhesives and sealants

Additive in phenolic and epoxy molding compounds

Additive to latex coatings, adhesives and sealants

Adhesion promoter in one-part silylated urethane adhesives and sealants based on organofunctional silane SPURSM Technology.

Features and Benefits:

Feature	Benefit
Polyamino functionality	Provides reactive site for amino-reactive resins. Good wetting of substrates.
Trifunctional silane	Excellent adhesion to inorganic substrates such as metal, glass, etc. Superior adhesion to plastics when employed in SPUR Technology-based adhesives or sealants.

Typical Physical Properties:

Physical Form	Light yellow to Clear liquid
Color, Pt-Co	max 20
Specific Gravity at 20°C, g/cm ³	1.010 – 1.030
Refractive Index at 25°C	1.439 – 1.447
Purity, %	97.0 % min

Applications:

Silane IOTA 792 may be used as an additive, eliminating the need for special primers in numerous bonding applications. Specific systems that demonstrate improved adhesion when silane IOTA 792 is used are:

1. RTV Silicones and Hybrid Silane-Crosslinked Sealants

Silane IOTA 792 addition to one- and two-part silicone-crosslinked sealants improves adhesion to a variety of substrates, including glass, steel, aluminum and concrete. This silane can dramatically enhance adhesion to a wide array of plastics when used in combination with SPURSM Technology for silylating urethane polymers. (For formulation and silylated prepolymer preparation information, please refer to Literature bulletin #112-026-30, "Silquest Organofunctional Silanes – Crosslinkers and Adhesion promoters for Urethane Adhesives and Sealants."

2. Polysulfide Sealants

When added to one- and two-part polysulfide sealants, Silane IOTA 792 provides better adhesion to a variety of substrates, including glass, aluminum and steel. Silane IOTA 792 is typically used at a loading of 0.5 to 1.0 percent by weight to the sealant. It disperses well and produces cohesive failure in the sealant rather than adhesive failure of the bond between the sealant and the substrate.

Furthermore, the use of silane IOTA 792 can eliminate the need for primers normally required to achieve adhesion to surfaces.

3. Plastisol Sealants

Adding Silane IOTA 792(0.5 to 1.5 weight percent) as a replacement for polyaminoamide adhesion promoters in plastisol sealants improves bonding to metal substrates. In addition to increased strength, the silane-modified plastisol sealant has better overall appearance than a system that uses polyaminoamide adhesion promoters. Silane IOTA 792 modified plastisol systems have a very light color, and the cured compound is bubble-free.

4. Additive in Phenolic and Epoxy Molding Compounds

Silane IOTA 792, as an additive in phenolic and epoxy molding compounds, reduces the water absorption of molded composites. This, in turn, leads to improved wet electrical properties, particularly at low frequencies. High-temperature strength properties are also improved.

Validity period and storage:

Stored in cool and dry place, avoiding water, funder, heat source and light, the validity period will be 6 months on such condition.

Package:

1. 25KGS/Plastic Drum
2. 200 KGS/Steel Drum
3. 1000KGS/IBC