

Manta S122

Isocyanate Functional Dialkoxy Silane

Description

Manta S122 is our ultimate flagship isocyanate-functional silane, featuring a highly reactive isocyanate group and a methyldiethoxy silyl group. This unique molecular architecture combines two highly sought-after formulation benefits:

It undergoes hydrolysis to release safe, non-toxic ethanol (unlike methoxy variants), ensuring strict environmental compliance.

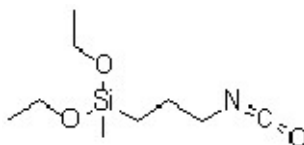
Its dialkoxy structure acts as a linear chain extender, dramatically reducing crosslink density to produce ultra-flexible, low-modulus elastomers.

It is the premier end-capping agent for formulators demanding both extreme elongation capabilities and uncompromising eco-friendly profiles.

It is the exact chemical equivalent to industry standards such as Shin-Etsu® KBE-9207.

Typical Physical Properties

Manta Code:	S122
Chemical Name:	(3-Isocyanatopropyl)methyldiethoxysilane
Synonyms	(gamma-Isocyanatopropyl)methyldiethoxysilane;
CAS No. :	33491-28-0
EINECS No. :	
Molecular weight:	217.34
Appearance:	Straw liquid
Purity (by GC, %):	96.0 min
Specific Gravity ($\rho_{20^{\circ}\text{C}}$, g/cm ³)	0.94±0.1
Refractive Index ($n_{25^{\circ}\text{D}}$):	Approx. 1.4200
Boiling Point:	235.0°C
Flash Point:	96°C Closed Cup
Chemical Structure:	



Properties

- Eco-Friendly Byproduct:** Releases non-toxic ethanol upon moisture curing, bypassing stringent restrictions on methanol-releasing chemicals.
- Ultra-High Flexibility:** The presence of the methyl group limits 3D crosslinking, acting as a superior chain extender to yield low-modulus, high-movement sealants and coatings.
- Rapid Reactivity:** The active isocyanate group bonds instantly with active hydrogen species

(amines, hydroxyls, polyols).

4. Premium Adhesion Promotion: Enhances wet and dry adhesion of polymer systems to challenging inorganic substrates without sacrificing coating flexibility.

Applications

Manta S122 is the ultimate raw material for high-end polymer synthesis:

1. Premium Polymer End-Capping: The ultimate choice for end-capping polyols in the synthesis of Silane-Modified Polymers (SMP / MS Polymer) and SPUR systems destined for the European and North American green-building markets.
2. High-Movement Joint Sealants: Critical for formulating expansion joint sealants that require massive thermal expansion/contraction capabilities without cohesive failure.
3. Eco-Friendly Adhesives & Coatings: Used as an additive or modifier in polyurethane systems where safety, low VOCs, and high flexibility are mandatory.

Packaging

In 20KG, 25kg iron pail, 200KG drum

Safety and Storage

Keep in a cool and dry place and avoid storage in direct sunlight. Shelf life is min. 12 months. It is shipped as hazardous substance.

Contact Information

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