

Product Information

Dynasylan® 9116

Hexadecyltrimethoxysilane

PRODUCT DESCRIPTION

Dynasylan® 9116 is a monomeric long-chain alkylfunctional silane.

Dynasylan® 9116 is a clear colourless liquid and soluble in common organic solvents (e.g. ethanol, iso-propanol). However its low volatility and viscosity make Dynasylan® 9116 an easy-to-handle additive. During the hydrolysis reaction between water and Dynasylan® 9116 a certain amount of methanol (VOC) is released.

Typical Properties

Property	Unit	Value
Chemical Name		Hexadecyltrimethoxysilane
Density (20 °C) DIN 51757	g/cm ³	~0.90
Viscosity (20 °C) DIN 53015	mPa·s	6-8

The data represents typical values (no product specification)

TYPICAL APPLICATIONS

Dynasylan® 9116 is a bifunctional organic compound in which the functional silanol groups can be bonded to an

inorganic substrate and the organophilic alkyl group can interact with a suitable polymer.

Examples of suitable inorganic substrates are:

- mineral fillers like, e.g. quartz, wollastonite or ATH
- inorganic pigments
- concrete

The organophilic long-chain alkyl group of Dynasylan® 9116 can interact with non-polar polymers like, e.g. polypropylene.

Dynasylan® 9116 finds application in the products of many industries. Examples are:

- as a pretreatment or an additive to mineral-filled thermoplastic compounds
- as scorch retardant in wire & cable production
- as an additive for adhesives and sealants to improve adhesion to the substrate

BENEFITS & ADVANTAGES

Because of its unique long-chain alkyl functionality, Dynasylan® 9116 exhibits superior hydrophobicity on substrates, excellent compound properties and forms weather- and moisture-resistant bonds to substrates as well.

Use of Dynasylan® 9116 silane results in:

- better filler dispersion allowing highly-filled compound formulations
- enhanced mechanical properties, e.g. improvements in toughness in wollastonite-filled polypropylene compounds
- waterproofing by impregnation when used as a water-repellent

HANDLING & PROCESSING

Before considering the use of Dynasylan® products please read its Safety Data Sheet (SDS) thoroughly for safety and toxicological data as well as for information on proper transportation, storage and use.

The Safety Data Sheet is available upon request from your local representative, customer service or from Evonik

Operations GmbH, Product Safety Department, E-MAIL
sds-hu@evonik.com.

PACKAGING

Dynasylan® 9116 is supplied in 180 kg drums and 850 kg containers.

STORAGE

It is recommended to store Dynasylan® 9116 above 0°C. The product becomes solid when stored cold (e.g. at -10°C). However, singular freezing does not influence the product quality. Frozen product is re-useable after complete thawing and homogenization. Accurate stirring is sufficient for homogenization.

SHELF LIFE

Dynasylan® 9116 has a shelf life of minimum 12 months from delivery in an originally sealed drum or container.

Registration Listings

Registry	Status
Australia (AIIC)	Yes
Canada (DSL)	Yes
China (IECSC)	Yes
EU (REACH)	Yes
EU (EINECS/ELINCS)	Yes
Japan (ENCS)	Information on Request
South Korea (KECL)	Yes
Philippines (PICCS)	Yes
Taiwan (TCSI)	Yes
USA (TSCA)	Yes

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