

Product Information

Dynasytan® 2101

3-Ureidopropyl(trimethoxysilane)

CAS NUMBER

confidential

PRODUCT DESCRIPTION

Dynasytan® 2101 is a 100% active ureidosilane. It contains no organic tin compounds and no toxic carbamates above the declaration limit.

Dynasytan® 2101 is soluble in water, alcohols, ketones, esters or aromatic hydrocarbons.

Typical Properties

Property	Unit	Value
Density (20 °C) DIN 51356	g/cm ³	~1.142-1.154
Flash Point, min. DIN EN ISO 2719	°C	140
pH Value (20°C) DIN 19268, 1:1 in water		-4.0-8.5
Refractive Index (20 °C) DIN 51423		1.462
Viscosity (20°C) DIN 53015	mPa·s	~400-800

The data represents typical values (no product specification)

TYPICAL APPLICATIONS

The dual nature of its reactivity allows Dynasytan® 2101 to bind chemically to both inorganic materials and organic polymers.

In the presence of water, the methoxy (Si-OCH₃) groups of Dynasytan® 2101 hydrolyze to form reactive silanol

(Si-OCH₃) groups, which can bond to a variety of inorganic substrates.

Examples of suitable inorganic substrates are:

- glass
- glass fibers
- glass wool
- metals
- and various fillers

The organophilic ureido group of Dynasytan® 2101 can react with a suitable polymer.

Examples of suitable polymers are:

- Thermosets like epoxy, phenolic, furanic and melaminic resins
- Thermoplastics like PA, PBT, EVA, PPS, PE, PP, PVB, acrylates
- Elastomere like silicones

Dynasytan® 2101 finds application in the products of many industries.

Examples are:

- as a size constituent for glass fiber/glass fabric composites
- as an additive to foundry resins and abrasives
- as an additive to thermoplastic compounds
- as an additive for adhesives and sealants
- as an additive and / or primer for paints and varnishes to improve adhesion to the substrate

BENEFITS & ADVANTAGES

Important product effects, that can be achieved by using Dynasylan® 2101 are:

- improved mechanical properties, e.g. flexural strength, tensile strength, impact strength, modulus of elasticity
- improved resistance to moisture and corrosion
- lower tendency of colouring effects during storage compared to aminosilanes

Dynasylan® 2101 helps as well to improve processing properties such as:

- better filler dispersion allowing highly-filled compound formulations
- lower VOC emission compared to solvent based urei-dosilanes

HANDLING & PROCESSING

Before considering the use of Dynasylan® products please read its actual 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 on our website <https://silanes.evonik.com/en> or upon request from your local representative, customer service or from Evonik Operations GmbH, Product Safety Department, E-MAIL sds-hu@evonik.com.

PACKAGING

Dynasylan® 2101 is supplied in 25 kg PE cans, 225 kg drums and 1000 kg IBCs.

STORAGE

It is recommended to store Dynasylan® 2101 above 5°C.

However, singular or partly freezing does not influence the product quality. Frozen product is re-usable after complete thawing and homogenization. Accurate stirring is sufficient for homogenization.

SHELF LIFE

Dynasylan® 2101 has a shelf life of minimum 12 months from delivery in an originally sealed can, drum or IBC.

Registration Listings

Registry	Status
Australia (AIIC)	Yes
China (IECSC)	Yes
European Union (EINECS/ELINCS)	Yes
South Korea (KECL)	Yes
Philippines (PICCS)	Yes
United States of America (TSCA)	Yes

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