

Product Information

Dynasylan® 6498

vinyl silane concentrate (oligomeric siloxane) containing vinyl and ethoxy groups.

CAS NUMBER

confidential

PRODUCT DESCRIPTION

Dynasylan® 6498 is a vinyl silane concentrate (oligomeric siloxane) containing vinyl and ethoxy groups.

Dynasylan® 6498 is a colourless, nearly odorless low-viscosity liquid.

Dynasylan® 6498 is an excellent compatibiliser between inorganic fillers (e.g. kaolin, MDH, ATH) and organic polymers (e.g. EPDM, EVA, PE).

The high boiling point of Dynasylan® 6498, together with its high flash point, gives it outstanding advantages with respect to safety and handling during processing. From an environmental viewpoint it should be noted that the amount of released hydrolysis ethanol (VOC) is significantly reduced compared to monomeric vinyl silanes.

Typical Properties

| Property | Unit | Value |
|---------------------------------------|-------------------|-------|
| Density (20 °C) DIN 51757 | g/cm ³ | ~1 |
| Viscosity (20 °C) DIN 53015 | mPa·s | 3-7 |

The data represents typical values (no product specification)

TYPICAL APPLICATIONS

Dynasylan® 6498 is excellent as an adhesion promoter, dispersion and hydrophobation agent in mineral filled compounds. In the presence of moisture, the ethoxy groups of Dynasylan® 6498 hydrolyse to produce ethanol and reactive silanol groups. These silanol groups react with the filler via silicon-oxygen bridges. The vinyl functional groups of Dynasylan® 6498 react with the polymer phase in the presence of radicals: A major field of application for miner-

al-filled compounds is the cable industry. EPDM and EVA can be processed into highly filled cable compounds through the adhesion promoting and hydrophobising effect of Dynasylan® 6498.

BENEFITS & ADVANTAGES

The EPDM and EVA polymers with Dynasylan® 6498 are for the halogen-free, non-toxic, environmentally-friendly flame retardant cable compounds (HFFR) based on ATH and MDH.

In addition, Dynasylan® 6498 can be used in many other applications such as filler and pigment coating, dispersions etc.

Typical property improvements obtained by using Dynasylan® 6498 in filled polymers are:

- improved filler dispersion
- good processability
- significantly reduced water-uptake excellent balance between tensile strength and elongation at break at a high level
- improved chemical resistance
- strongly reduced tendency to stress cracking
- higher impact strength
- higher abrasion resistance

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 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® 6498 is supplied in 25 kg containers, 200 kg drums and 1.000 kg bulk containers.

STORAGE

The containers must remain tightly sealed and stored in a cool, well-ventilated place protected against moisture.

SHELF LIFE

In the unopened container the shelf life of Dynasylan® 6498 is min. 12 months from delivery.

Registration Listings

| Registry | Status |
|---------------------------------|------------------------|
| Australia (AIC) | No |
| Canada (DSL) | Information on Request |
| China (IECSC) | Yes |
| EU (REACH) | Exempted |
| European Union (EINECS/ELINCS) | Yes |
| Japan (ENCS) | Yes |
| South Korea (KECL) | Yes |
| Taiwan (TCSI) | Yes |
| United States of America (TSCA) | Yes |

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