

Product Information

Dynasylan® SILBOND® HT-28A

Ethyl polysilicate low-VOC hybrid binder

CAS NUMBER

confidential

PRODUCT DESCRIPTION

Dynasylan® SILBOND® HT-28A is a milky-white, low-viscosity pre-hydrolyzed ethyl polysilicate hybrid binder with content ranging from 32.5 to 33.5% silica (as SiO₂). The silica content is resultant of a mixture of silica derived from TEOS and other components. Advantages include improved toughness and excellent performance in high-temperature applications. The improved toughness is a direct result of the higher silica content as compared to a ethyl polysilicate binder.

| Property | Unit | Value |
|---------------------|-------|----------------|
| Appearance | | Colorless |
| Boiling Point, min. | °C | 78.3 |
| Density (20 °C) | g/cm³ | ~1.030-1.050 |
| Flash Point, min. | °C | 19 |
| Freezing Point | °C | -75 |
| Odor | | faint inherent |
| Viscosity | mPa·s | ~4.0-12.0 |
| (20 °C) | | |

TYPICAL APPLICATIONS

This material is formulated for use in two component inorganic zinc-rich primers.

| Product Composition | | |
|---|------|-----------|
| roduct Composition | Unit | Value |
| licon Dioxide (SiO ₂) Content | wt% | 32.5-33.5 |

BENEFITS & ADVANTAGES

Dynasylan® SILBOND® HT-28A can be used, as delivered, to make inorganic zinc-rich primers for the marine and industrial coatings industries.

The degree of hydrolysis and acidity have been optimized for the required reactivity and sufficient storage stability.

The hydrolysis and condensation has been started during the production of the binder. Through a shift in the pH this process is accelerated. This shift is achieved by addition of fillers, pigments, additive, or through the evaporation of solvent or exposure to atmospheric moisture. The resulting silicic acid gel cures rapidly at ambient temperatures in air. The process of curing can be accelerated through the addition of alkali catalysts.

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® SILBOND® HT-28A could be available in pails, drums, totes and tanker quantities.

Please ask for further details.



SHELF LIFE

In unopened container Dynasylan® SILBOND® HT-28A has a shelf life of min. 6 months from date of manufacture.

| Registry | Status |
|---------------------------------|--------|
| Australia (AIIC) | Yes |
| Canada (DSL) | Yes |
| China (IECSC) | Yes |
| EU (REACH) | Yes |
| Japan (ENCS) | Yes |
| South Korea (KECL) | Yes |
| New Zealand (NZIoC) | Yes |
| Philippines (PICCS) | Yes |
| Taiwan (TCSI) | Yes |
| United States of America (TSCA) | Yes |

Disclaimer

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