

## Product Information

# Dynasylan® SILBOND® H-5

## Ethyl polysilicates binder

### PRODUCT DESCRIPTION

Dynasylan® SILBOND® H-5 is a clear, low-viscosity pre-hydrolyzed ethyl polysilicate binder that has been designed for the precision investment casting industry. It contains a higher percentage (approximately 19.5%) silica content (as SiO<sub>2</sub>) and a lower acidity level than Dynasylan® SILBOND® H-4.

#### Typical Properties

Property	Unit	Value
Appearance		Clear Liquid
Boiling Point, min.	°C	78
Density (20 °C)	g/cm <sup>3</sup>	~0.92-0.93
Flash Point, min.	°C	13
Viscosity (20 °C)	mPa·s	5.0

The data represents typical values (no product specification)

### TYPICAL APPLICATIONS

It is well suited for use in block-casting applications.

#### Product Composition

Product Composition	Unit	Value
Silicon Dioxide (SiO <sub>2</sub> ) Content	wt%	19.5-22.0

The data represents typical values (no product specification)

### BENEFITS & ADVANTAGES

Dynasylan® SILBOND® H-5 can be used, as delivered, to make ceramic molds for the **Precision Investment Casting industry**.

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® SILBOND 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://www.evonik.com/en/company/businesslines/se.html> or upon request from your local representative, customer service or from Evonik Operations GmbH, Product Safety Department, E-MAIL [sds-hu@evonik.com](mailto:sds-hu@evonik.com).

### PACKAGING

Dynasylan® SILBOND® H-5 could be available in pails, drums, totes and tanker quantities.

Please ask for further details.

### SHELF LIFE

In unopened container Dynasylan® SILBOND® H-5 has a shelf life of min. 6 months from date of manufacture.

#### Registration Listings

Registry	Status
Australia (AIC)	Yes

#### Registration Listings

Registry	Status
Canada (DSL)	Yes
China (IECSC)	Yes
EU (REACH)	Yes
Japan (ENCS)	Yes
South Korea (KECL)	Yes

#### Registration Listings

Registry	Status
New Zealand (NZIoC)	Yes
Philippines (PICCS)	Yes
Taiwan (TCSI)	Yes
USA (TSCA)	Yes

#### Disclaimer

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