

Product Information

Dynasylan® SILBOND® HT-33

Ethyl polysilicate hybrid binder

CAS NUMBER

confidential

PRODUCT DESCRIPTION

Dynasylan® SILBOND® HT-33 is a milky-white, low-viscosity pre-hydrolyzed ethyl polysilicate hybrid binder that contains a mixture of silica derived from TEOS and other components. The silica content ranges from 32.7% to 34.0% (as SiO₂).

Typical Properties

Property	Unit	Value
Appearance		Colorless
Density (20 °C)	g/cm ³	-1.028-1.045
Flash Point, min.	°C	18.9
Viscosity (25 °C)	mPa·s	-4.0-12.0

The data represents typical values (no product specification)

TYPICAL APPLICATIONS

This material is formulated for use in two component inorganic zinc-rich primers. Advantages include improved toughness and excellent performance in high-temperature applications. The improved toughness is a direct result of the higher SiO₂ content.

Product Composition

Product Composition	Unit	Value
Silicon Dioxide (SiO₂) Content	wt%	32.7-34.0

The data represents typical values (no product specification)

BENEFITS & ADVANTAGES

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

toughness and excellent performance in high-temperature applications. The improved toughness is a direct result of the higher SiO₂ content.

HANDLING & PROCESSING

Dynasylan® SILBOND® HT-33 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.

PACKAGING

Dynasylan® SILBOND® HT-33 could be available in pails, drums, totes and tanker quantities.

Please ask for further details.

SHELF LIFE

In unopened container Dynasylan® SILBOND® HT-33 has a shelf life of min. 6 months from date of manufacture.

HAZARDOUS SUBSTANCE

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.

Registration Listings

Registry	Status
----------	--------

Australia (AIC)	Yes
-----------------	-----

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
---------------	-----

United States of America (TSCA)	Yes
---------------------------------	-----

Disclaimer

This information and all further technical advice are based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third-party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

Evonik Operations GmbH

Smart Effects
Rodenbacher Chaussee 4
63457 Hanau
Germany
ask-se@evonik.com
ask-se-asia@evonik.com
ask-se-america@evonik.com
www.evonik.com/smarteffects