

# Dynasylan® HYDROSIL 2909

## Aqueous oligomeric aminoalkylfunctional silane hydrolysate

### Technical data

Properties and test methods	Value	Unit	Method
Color	< = 50	mg Pt-Co/l	ISO 6271
Content of solids	35 - 40	wt.-%	DIN 38409-H1-1
Density (20°C)	1.05 - 1.15	g/cm <sup>3</sup>	DIN 51757
Flash point	> = 95	°C	DIN EN 22719
pH (20°C)	4 - 5	-	DIN 19268
Viscosity (20°C)	< 100	mPa·s	DIN 53015

### Registrations

#### Dynasylan® HYDROSIL 2909

EINECS/ELINCS (EU):	Yes
AICS (Australia):	No
DSL/NDSL (Canada):	*
PICCS (Philippines):	Yes
TSCA (USA):	Yes
IECS (P.R. China):	Yes
ENCS (Japan):	*
ECL (South Korea):	No
REACH (Europe)	Exempted
* available on request	

Dynasylan® HYDROSIL 2909 provides the producer of high-performance laminate materials with an adhesion promoter between inorganic materials (glass, minerals and metals) and organic polymers (thermosets, thermoplastics and elastomers).

Dynasylan® HYDROSIL 2909 can act as binder or co-binder in water based sol-gel systems. Dynasylan® HYDROSIL 2909 is a almost colorless liquid.

### Safety and handling

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 after registration on our website [www.dynasylan.com](http://www.dynasylan.com) 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, storage and shelf life

Dynasylan® HYDROSIL 2909 is supplied in 25 kg PE cans and 200 kg drums.

It is recommended to store Dynasylan® HYDROSIL 2909 above 4°C but below 25°C.

Dynasylan® HYDROSIL 2909 has a shelf life of minimum 6 months from delivery in an originally sealed can or drum.

## Properties and applications

- Surface treatment of minerals
- Glass fibre
- reinforcement Priming of glass and metal Surface
- modifier for organic materials. Additive for water-borne polymer systems

The dilution of Dynasylan® HYDROSIL 2909 should be preferably done at pH 3-5.

Depending on the area of application a concentration of active compound of approx. 0.5-5 wt.-% may be employed. As a consequence, Dynasylan® HYDROSIL 2909 can be simply diluted with distilled water. An aqueous solution containing 5 % Dynasylan® HYDROSIL 2909 is stable for more than 2 weeks if the pH value is < 7. Please note that the stability decreases dramatically if the pH is > 7. For the formulation of a silane primer a silane content of 1-2 wt.-% is sufficient. Substrates need to be cleaned and degreased before pre-treatment, then transparent films can be obtained.

The following advantages are obtained over conventional organofunctional silanes:

### **Increased product and processing reliability:**

- no liberation of flammable organic constituents
- flash point > 95°C

### **Process flexibility:**

- processing possible at elevated temperatures and in the vicinity of ignition sources or static charge

### **Applicational advantage:**

- directly applicable in water based polymer systems or binder solutions

### **Environmental protection:**

- hydrolysis does not result in liberation of volatile organic substances

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**Europe/Middle-East/Africa****Evonik Operations GmbH**

Silanes Business Line  
Rodenbacher Chaussee 4  
63457 Hanau-Wolfgang  
Germany  
FAX +49 6181 59 713915  
dynasytan@evonik.com  
www.dynasytan.com

**Asia / Pacific****Evonik (SEA) Pte. Ltd.**

Silanes Business Line  
3 Internatioanl Business Park  
#07-18, Nordic European  
Centre  
Singapore 609927  
PHONE +65 6809 6906  
FAX +65 6809 6699  
dynasytan@evonik.com  
www.dynasytan.com

**Asia / Pacific****Evonik Japan Co. Ltd**

Silanes Business Line  
12th Floor Monolith Building  
2-3-1, Nishi-Shinjuku-ku  
Tokyo 163-0912  
Japan  
PHONE +81 353 23 7446  
FAX +81 353 23 7397  
dynasytan@evonik.com  
www.dynasytan.com

**North America****Evonik Corporation**

Silanes Business Line  
299 Jefferson Road  
Parsippany, NJ 07054  
USA  
PHONE (TOLL FREE) +1 800 237 67  
45  
PHONE +1 973 929 8513  
dynasytan@evonik.com  
www.dynasytan.com

**Asia / Pacific****Evonik Specialty  
Chemicals (Shanghai) Co. Ltd.**

Silanes Business Line  
55, Chungdong Road  
Xinzhuang Industry Park  
Shanghai 201108  
P.R. China  
PHONE +86 21 61191-399  
FAX +86 21 61191-648  
dynasytan@evonik.com  
www.dynasytan.com

**Asia / Pacific****Evonik India Pvt. Ltd.**

Silanes Business Line  
Krislon House  
Saki Vihar Road, Anderi (E)  
Mumbai - 400 072  
India  
PHONE +91 226 7238 809  
FAX +91 226 7238 811  
dynasytan@evonik.com  
www.dynasytan.com

**North America****Silbond Corporation**

9901 Sand Creek Highway  
Weston, MI 49289  
USA  
PHONE +1 732 981 5004  
FAX +1 732 981 5275  
dynasytan@evonik.com  
www.dynasytan.com

**Asia / Pacific****Evonik Korea Ltd.**

Silanes Business Line  
3F (Nongshim Sungmookwan  
B/D)  
112 Yeouidaebang-Ro  
Dongjak-Gu  
Seoul, 07057  
Korea  
PHONE +82 2320 4773  
FAX +82 2783 2520  
dynasytan@evonik.com  
www.dynasytan.com

**Region Central and South America****Evonik Brasil Ltda.**

Silanes Business Line  
Rua Arquiteto Olavo Redig de Campos,  
105  
Torre A - 04711-904 São Paulo- SP  
Brazil  
PHONE +55 11 3146 9627  
dynasytan@evonik.com  
www.dynasytan.com

**Asia / Pacific****Evonik Taiwan Ltd.**

Silanes Business Line  
Artist Construction Bldg.  
9F, No. 133  
Min Sheng East Road, Sec 3  
Taipei, 105 Taiwan, R.O.C.  
Taiwan 10596  
PHONE +886 227 17 1242 #247  
FAX +886 227 17 2106  
dynasytan@evonik.com  
www.dynasytan.com