



for tomorrow's Technology

# SilStab<sup>™</sup>

**Stabilised Potassium Silicate Solutions** 



## **Stabilised Potassium Silicate Solutions**

- Renders, plaster and primers
- Outdoor & indoor paints
- Coatings of construction- and insulation boards

## General

The SilStab<sup>™</sup> products are stabilised potassium silicate solutions with high silica content. Due to the additional stabilisation, these SilStab<sup>™</sup> products can easily be combined with different kinds of pigments and fillers without coagulation or gelling of the paint. Combined with the hyperdispersant ADDISP<sup>™</sup> 600N, dispersing properties can be further improved to minimise sedimentation and syneresis.

These SilStab<sup>™</sup> silicates give hardened surfaces, better silicified with low efflorescence. SilStab<sup>™</sup> grades like SilStab<sup>™</sup> HL+ and SilStab<sup>™</sup> DC3 are further hydrophobic modified to even further improve the high water resistance.

The SilStab<sup>™</sup> products can also easily be combined with polymer dispersions like acrylate-, styrene/acrylic-, styrene/butadiene- or VA/VeoVa dispersions.

Product name	% K-Silicate	Density g/ml	Viscosity* g/cm³	Hydrophobic Modified
SilStab™ L100	~22	~1.225	< 50 mPa·s	-
SilStab™ HL+	~28	~1.405	< 50 mPa·s	$\checkmark$
SilStab™ DC3	~22	~1.325	< 50 mPa·s	$\checkmark$
			* 25°C (Brook	(field #1 @ 50 rpm)

## The SilStab<sup>™</sup> grades



## **Applications**

SilStab<sup>™</sup> products can be used in a wide variety of applications for coatings in the building industry without or in combination with an organic binder.

## **Application properties**

Silicifies surfaces – High durability	Excellent penetration in porous substrates
High water vapour permeability	(High) water resistance
Gives low dirt pick-up	Non-flammable
Hard and scratch resistant surfaces	Non-yellowing / UV resistant
Affinity with mineral surfaces	Contains no nutrients for algae and fungi

# Use in renders (Putz), paints and primers

#### **Dispersions**

When used in combination with polymer emulsions or dispersions like pure acrylic, styrene/acrylic and VA/VeoVa, care should be taken that these binders are based on alkaline and saponification resistant polymers with low MFFT!

#### **Extenders/fillers and adhesives**

Inorganic materials are preferred and should not contain free multi-valent cations. Reactive fillers should be avoided as they will influence viscosity and might cause gelation.

Inert additives that are alkaline and saponification resistant are suitable for all stabilised SilStab<sup>™</sup> containing formulations.

The 'Universal Additive' like BioWet<sup>™</sup> P 77 or P 80 and pigment dispersant like ADDISP<sup>™</sup> 600N are excellently suitable to be used in combination with SilStab<sup>™</sup> products in the formulation of renders (Putz) and paint (see separate brochures). Guide formulations are available upon request.

#### **Primer formulations**

SilStab<sup>™</sup> products are solutions and not colloidal systems. They therefore have excellent and rapid penetration in dry porous substrates. Due to their penetration power and consequently the process called "silicification", a silicate matrix is formed with, depending on the concentration, intumescent properties.

### **CONTACT INFORMATION**

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