



TECHNICAL DATA SHEET



No. 0207/UK
Rev.-No. 07/09.2005

StoSil Color

Silicate based facade paint with dispersion, in accordance with DIN 18 363 part 2.4.1

Material description



Water-based material containing an inorganic binder, fillers and additives.

Binder

Potash waterglass, copolymers (organic additives).

Fillers

Carbonates and silicates.

Additives

Film forming agent, wetting agent, anti-foaming agent and thickeners.
Pigments: Titanium dioxide/rutile

Thinner

Diluting agent: Clean water.

Uses

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On wall and ceiling surfaces as top coat on mineral substrates.

Areas of use

For exterior use.

Restrictions

- Do not use on damp substrates
- Do not use on organic substrates

Uses not clearly described in this Technical Data Sheet should only take place after consultation with Sto Ltd.

Application

Substrate

The substrate should be load-bearing, level, clean and dry as well as free of efflorescences and separating agents.
Critical substrates must be tested for suitability (create a test surface).

Substrate preparation

Remove loose paint and plaster coatings.

Allow new plasters to set for at least 14 days before proceeding.
Non load-bearing, weak suction substrates have to be primed. (see table 1 for details)

Coating procedure

Undercoat (if necessary)

Choice of undercoat depending on type and condition of the substrate (see table 1).

Intermediate coat

StoSil Color diluted by approx. 5 - 10 % with clean water.

Top coat

StoSil Color diluted by up to 5 % with clean water.

Material preparation

StoSil Color can be diluted by up to 10 % with clean water.

Manual application

By brush or roller.

Machine application

The material can be spray applied. See table 2 for details. (More details on request.)

Drying time

StoSil Color dries physically by water evaporation.

The drying time depends on the temperature and the relative humidity.

Product characteristics

- Outstanding water vapour and CO₂ permeability due to the mineral structure.
- Offers good protection against driving rain.
- Highly resistant to ageing and to aggressive atmospheres.
- Excellent adhesion to mineral substrates.
- Easily applicable by brush, roller or airless spray.
- "Mineral" matt finish.
- Available in many historically used colours.
- Water dilutable, physiologically and ecologically safe.

At + 20 °C and 65 % relative humidity the product will be touch dry in approx. 3 - 4 hours and can be overcoated after approx. 6 - 8 hours.

A chemical reaction (silicification) with mineral substrates is possible.

Drying times will be prolonged by low temperatures and/or high humidity.

Consumption

Approx. 0.30 – 0.40 ltr/m² for two coats. Consumption will vary according to the substrate and the method of application.

Application temperature

Air and substrate temperature should not be less than + 5 °C (until the material has completely set.)

Protective measures

During application protect skin and eyes. Cover glass, bricks, ceramics, natural stone, lacquers and metal. Clean off any splashes immediately with water.

Cleaning of tools

Immediately after use with water.

Maintenance

StoSil Color can be overcoated with StoSilco Color, Sto silicate, or Sto dispersion paints.

Delivery

Product code and name

00207-014 StoSil Color, white.
00207-050 StoSil Color, tinted.

Packaging

Pail (PE): 15 ltr.

Colours

Available in white and limited tinting of the StoColor System.

Due to the chemical setting process, Sto Ltd cannot guarantee accuracy of colour tones not prevention of staining.

StoSil Color can be tinted by up to 1 % with StoTint Aqua.

During strong mechanical load it is possible that - with intensive colours - discoloration may occur. This is, due to the white natural moulding sand used by filler break or pigment abrasion of and/or used natural fillers, these may appear lighter. The product quality and functionality are not affected.

Gloss

Matt.

Algae and fungus prevention

StoSil Color can be manufactured with additional bactericidal, fungicidal and algicidal additives. When ordering, please attach the term "film preservation". (additional price).

Please note that while this will prolong the prevention of algae and fungus growth, the effects are not guaranteed to last indefinitely.

When using products containing an active agent, sufficient coating thickness must be achieved. This is generally only achieved with two-coat application. Highly alkaline influences reduce the effect of the film preservative.

Storage and transport

Marking

In accordance with European Union guidelines and national regulations:

VbF: -
EU/GefStoffV: -
GGVS/ADR: -
UN-Nr.: -

GISBAU-Code: M-SK01

VVS-Code: -

BAGT-Nr.: 619004

Storage

Keep container tightly closed and store in frost free conditions.

Storage life

In unopened original containers (pails), product can be stored for a minimum of 9 months. (Relevant data: refer to packaging).

Transport

No special protective measures or hazardous goods markings are necessary. Not marking requiring.

Environment and health

Health

Application of StoSil Color poses no known or suspected health risk when correct procedures are followed.

The bound material likewise poses no known or suspected health risk in the light or present knowledge.

Risk warnings (R-phrases)

None.

Safety precautions (S-phrases)

None.

Measures in case of accident

In case of accident: Soak up with absorbent material and dispose of in accordance with local regulations.

Disposal

Waste has to be disposed considering the local, official regulations. Material into drains to arrive do not leave.

Old, non-set material should be mixed with cement, left to dry and then disposed of.



Waste key in accordance with the European Waste Catalogue: 08 01 12.

For further information on handling, storage and disposal of the product, please refer to the current EU Material Safety Data Sheet, available on request for professional users. (Relevant data).

General information

For all contracts - whether made verbally or in writing - Sto Ltd general conditions of sale apply.

Validity

This Technical Data Sheet is valid in all countries without Sto subsidiary.

Certificates and test reports

Test reports o.ae. on request.

Table 1: Substrate preparation - Priming coat

Substrate		Type of coating (if necessary)
Fining pebbled texture coat	new	StoPrim Silicat
	old	StoPrim Micro
Lime paint/plaster (mortar group P I b,c)	new	StoPrim Silicat
	old	StoPrim Silicat
Chalky sandstone	new	StoPrim Micro
	old	StoPrim Micro
Lime cement plaster	new	StoPrim Silicat
	old	StoPrim Silicat
Natural sandstone	new	StoPrim Micro
	old	StoPrim Micro
Dispersion silicate paint	new	StoPrim Silicat
	old	StoPrim Silicat

Table 2: Airless spray values

Spray nozzle size		Spray angle	Pressure in bar	Additional water
mm	inch			
0.49 - 0.53	0.019 - 0.021	40 ° - 60 °	140 - 210	up to 5 %

Table 3: Physical data

	Tested to	Value/Test result	Unit
Density in supplied form	BS EN ISO 2811-2	1.6	[kg/dm ³] ⁽¹⁾
Non volatile part (solid material)		62	M-[%]
pH-value		10.5 – 12.0	[1]
Water vapour diffusion			
Water vapour transmission rate V	BS EN ISO 7783-2	> 2100 ⁽²⁾	[g/m ² ·d]
Diffusion equivalent air layer thickness s _d (material thickness = 150 µm)	BS EN ISO 7783-2	< 0.01	[m]
Water vapour diffusion resistance factor µ	BS EN ISO 7783-2	< 66	[1]
Water permeability			
Liquid water transmission rate w	BS EN 1062-3, § 10	< 0.10 ⁽³⁾	[kg/m ² ·h ^{0.5}]
Lightness			
	DIN 53 778		[%]
Brightness			
	CIE	80	[%]
Degree of gloss			
	BS EN 1062-1, § 5.2	3	matt

⁽¹⁾ g/cm³ = kg/dm³ = kg/ltr

⁽²⁾ Class I - high

⁽³⁾ Class III - low

With the indication of the characteristic values it concerns average values. Due to the use of natural raw materials in our products the actual value can deviate slightly, without impairment of the product suitability.

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