



TECHNICAL DATA SHEET

1.1 PROTECTION AND FINISHING



► Siltop Sol-silicate

Silicate mineral paint

2504 / Version 4 / 05-03-2025



DESCRIPTION

Mineral paint for facades based on the combination of binders of silica sol and potassium silicate which allows correct anchoring both on mineral substrates as on substrates of organic nature. Complies with UNE-EN 1504 standards for products and systems for the protection and repair of concrete structures. Respond all the requirements established in the "GREEN BUILDING", offering the highest possible score for BREEAM and / or LEED certifications.

PROPERTIES

- High-penetration thin particle, with excellent adherence on porous supports.
- Extremely high water vapour-permeability, allowing the surface to breathe
- Resistant to the negative effects of weathering.
- High opacity.
- Resistant to the alkalinity of the surface, such as cement mortars, concrete, brick, etc.
- Due to the high reflection of sunlight presented by potassium silicate (liquid glass) in the white paint and its microcrystalline structure, a certain amount of thermal insulation is provided by the reflection of the sun rays.
- Its composition complies with standard DIN 18363, paragraph 2.4.1.
- Exceptional adhesion to the most common construction materials.
- Contributes to BREEAM and LEED certification.
- Due to its nature, it provides anti-mold protection to the film

USES

Indicated for the renovation and the application on paints, organically modified plasters, as well as on mineral supports. Not suitable for surfaces with movements such as wood, elastic coatings, alkyd paints or enamels, or mineral surfaces with protective treatments such as water or oil repellents.

TECHNICAL DATA

Appearance	Mineral matt.
Colour	White and colours from the Esencia and Coloritud charts.
Thinner	Siltop sol-silicato concentrate.
Viscosity (Brookfield RVT at 20°C). Poises	150 - 250
Density at 20°C (Kg/L)	1.45 ± 0.05
Content in solids % volume	35
Water vapour permeability (UNE-EN ISO 7783:2) (m)	0.1, high
Liquid water permeability (UNE-EN 1062-3:2008) (Kg/m2h0.5)	0.08, low
Accelerated ageing (EN 1062-11)	Unchanged
Yield (m²/L):	6 - 8
Drying at 20°C (min)	60
Second coat (hours)	3 - 4
Total drying (days)	15 - 20
Cleaning of utensils and stains	With water before drying.
Volatile Organic Compounds (COV).	Maximum product content 5.75 g/L

HOW TO APPLY

- Stir the product until totally smooth.
- The surfaces to be painted must be clean, dry and free of dust, grease, saltpetre, etc.
- To avoid joints being visible on large panels, enough personnel should be used and the paint applied all at once.
- Glass that might be splashed must be protected because stains cannot be removed.
- Workers should protect themselves against splashes.



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SURFACE AND AMBIENT CONDITIONS

AMBIENT TEMPERATURE:

Do not paint at a temperature of below 7°C .

RELATIVE HUMIDITY:

Never apply with relative humidity exceeding 80%.

AMBIENT CONDITIONS:

The paint should not be applied under conditions of excessive sunlight, strong winds, or if rain is forecast.

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SURFACE PREPARATION

UNPAINTED SURFACES:

Plaster/Cast plaster:

- On bare interior walls, it can be applied as long as they are previously prepared by applying a layer of acrylic primer diluted with water. One printing part with four water parts. Without preparation, it should not be applied to plaster walls.

New plasters:

- Class P I c (lime mortar); Class P II (bastard, lime and cement mortar) and Class P III (cement mortar). They should be left unpainted for 2-4 weeks, depending on weather conditions, to get a good setting. Apply two coats of SILTOP SOL-SILICATO, the first diluted at 15% with SILTOP SOL-SILICATO CONCENTRATE and the second diluted at 5% with the same diluent.

PRE-PAINTED SURFACES IN GOOD CONDITION:

Very absorbent and irregular plasters, degraded or aged plasters and old silicate paints well-adhered:

- First clean with medium pressure water of 120 bars. Once completely dry, apply SILTOP SOL-SILICATO CONCENTRADO mixed with water, at the rate of four parts of water with one part of SILTOP SOL-SILICATO CONCENTRADO with a yield of 5-10 m² / liter of pure product. Then finish with two coats of SILTOP SOL-SILICATO. The first diluted 10 - 15% with SILTOP SOL-SILICATO CONCENTRADO and the second pure or diluted 5%. If water is used as a diluent, the final hardness of the paint will be much lower. The repainting interval between the three coats must be at least 24 hours in good weather conditions.

Supports previously painted with organic paints:

- Regardless of the support to be repainted, its appearance must be homogenised; in other words, adjust the surfaces that are shiny to help to open the pores and foster adhesion. Check the adhesion and resistance of the paint. Correct any texture or planimetry differences that may exist with RHONA repair mortars. Test compatibility between coats.
- If the surface to be painted has a non-homogeneous appearance (various materials, areas with different colours, repairs, etc.), it is recommended to apply a coat of opaque acrylic primer in the desired colour, in order to regularise the colour, absorption and appearance of the surface (See possible application systems).

PRE-PAINTED SURFACES IN POOR CONDITION:

Supports previously painted with organic paints:

- These must be perfectly removed before painting.

Old plasters of the previously mentioned classes:

- Wash with hydro pressure, then prepare the surface by applying an acrylic primer diluted with water. One printing part with four water parts.

Brittle:

- If the paint is old or badly adhered with defects such as chalking, blistering, peeling, cracking, etc., it must be completely removed and then apply a coat of transparent acrylic fixer. (see possible application systems)

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Diseased:

- Surfaces with mould and algae: Removal and disinfection of mould or algae by vigorously rubbing the stain with a brush using household bleach or 10 volume hydrogen peroxide. It is finished with two finishing coats with anti-mould preservative for film protection.
- Surfaces with metal salts: These, coming from the slabs, are reddish or yellowish in colour; they must be covered with two coats of suitable anti-stain paint and then painted as normal.

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POSSIBLE APPLICATION SYSTEMS

Use a brush, roller or spray gun for normal application of Siltop Sol-Silicato. At least two top coats are recommended. Prior to the top coat and depending on the wall apply primer suitable for the yield specified in each case.

PRIMERS:

- Siltop sol-silicato concentrate Fixer diluent: fixing and consolidation of mineral surfaces where mineral or organic finishes are required. Undiluted product yield: 3 - 5 m²/L. Coats: 1

FINISH SILTOP SOL SILICATO:

- Yield: 6 - 8 m²/L
- Coats: 2

SAFETY

Consult the current safety data sheet for safe handling (Section 8.2). Unsuitable for children. Keep out of the reach of children. Do not place painted surfaces into the mouth.

REMOVAL

Take the necessary measures to ensure waste is kept to an absolute minimum. Analyse all possible methods for reuse or recycling, in line with the local and national legislation in force. Take the necessary measures to ensure waste is kept to an absolute minimum. Analyse all possible methods for reuse or recycling. Do not pour down drains or into the environment. Dispose of the product at an authorised waste disposal site or through an authorised waste management company. Waste must be handled, stored and disposed of pursuant to current local/national legislation.

STORAGE

See storage conditions indicated in section 7.2 of the current safety data sheet. Store the containers away from high temperatures, direct exposure to the sun and frost. Maximum recommended storage time: 12 months from manufacture in fully sealed original container, indoors and at temperatures between 5° and 35° C.

LEGAL TEXT NOTE

This information and, in particular, the recommendations regarding the application and final use of the product, are given in good faith, based on the current knowledge and experience of Isaval Paints of the products when they are properly stored, handled and applied, in normal situations, within its useful life, according to the recommendations of Pinturas Isaval. In practice, the possible differences in the materials, supports and actual conditions at the place of application are such that it cannot be inferred from the information in this document, no any other written recommendation, neither any advice offered, will insure the guarantee in terms of marketing or suitability for particular purposes, neither any obligation outside of any legal relationship that may exist. The user of the products must carry out the tests to verify their suitability according to the use they want to give. Pinturas Isaval reserves the right to change the specifications of its products. The property rights of third parties must be respected. All orders are accepted according to the terms of our current General Conditions of Sale and Supply. Users should know and use the latest and updated version of the local Product Data Sheets, a copy of which will be sent to whoever requests them, or can also be obtained on the page www.isaval.es. All data in this document are based on laboratory tests conducted at 20°C and 1 atm pressure. Measurements taken "on-site" may vary due to circumstances beyond our control, such as changes in environmental conditions of pressure and temperature.