



## PINTURA AL SILICATO TKROM SIL

### SALES FORMAT

15L, 4L



### DESCRIPTION

High quality single-component paint, based on potassium silicate, fillers, additives and mineral pigments, which petrifies with the mineral substrate on which it is applied, producing a controlled silicification reaction, which provides a very resistant film with a mineral appearance. It has a high penetration capacity and is long lasting. It does not crack, and waterproofs and protects the painted surfaces against the aggressiveness of atmospheric agents. It favours the thermo-hygrometric balance of walls due to the excellent breathability provided by its microcrystalline structure caused by the precipitation of colloidal silica. Complies with DIN 18363.

### SCOPE OF APPLICATION

Exterior/Interior. Due to its special characteristics, together with the aesthetics of its finish, it is the ideal product for the restoration of historic buildings or buildings of architectural interest. It gives new buildings a beautiful mineral effect finish. Facades. Stone. Restoration of historic buildings. Mineral substrates. Lime. Cement mortar. Concrete.

### PROPERTIES

- Lightfast colours
- Excellent water vapour permeability
- Rain waterproof
- Heat resistance
- Very good adhesion
- Rain waterproof
- Resistant to yellowing
- High elasticity in structural movements
- Very good adhesion
- Environmentally friendly: no VOCs
- Prevents the formation of moulds

Disponible **TKROMATIC**

### TECHNICAL DATA

#### CLASSIFICATION ACCORDING TO UNE-EN-1062

Finishing	G3 MATTE	UNE-EN 1062-1	14_06819-1
Brightness 85°.	< 5	ISO 2813	14_06819-1
Dry film thickness	E1 (50 microns per layer)	UNE-EN 1062-1	
Maximum particle size	S1 (<100 microns) Fine	ISO 1524	14_06819-1
Water vapour permeability	V1 (high) Sd < 0.14 m	ISO 7783-2	14_06819-1
Permeability to liquid water	W3 (low) < 0,1 kg/ (m <sup>2</sup> - h0.5)	UNE-EN 1062-3	14_06819-1

#### ADDITIONAL TECHNICAL DATA

Chemical composition	Potassium silicate based resins		
Colour	Cards and colours		
Theoretical performance	6-8 m <sup>2</sup> /L (50 microns dry)	ISO 23811	
Density	1,46 ± 0,05 g/mL	UNE-EN ISO 2811-1	
Viscosity	17 ± 3 Pa-s (20 rpm, R6)	ASTM D 2196-10	
Solids by volume	37 ± 2%	ISO 23811	
Wet scrub resistance	Class 2(<10 microns)		
VOC	0 g/L. Maximum permitted by EU: 40 g/L.	2004/42/II A Classification (c)	
Diluent	TKROM SIL IMPRIM.CEMENT		
Dilution	Depending on the application system		
Repainting time	4-6 hours		
Drying time	Touch-drying	30 min	UNE 48301
	Total drying	20-30 days	
	Washing:	25-30 days	
Cleaning	Water		

The specified technical data may vary in case of material tinting.  
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## PREPARATION OF THE SUBSTRATE

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### GENERAL RECOMMENDATIONS

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Outdoors, do not apply if rain is expected, in full midday sun or on humid days.

#### UNPAINTED OR NEW SURFACES:

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On exteriors, clean the entire surface by mechanical means, e.g. high-pressure water jetting. The surface should be consistent and firm, with no tendency to flake or peel. If the substrate needs to be levelled, repair with suitable products from the TKROMPLAST range.

#### ALREADY PAINTED SURFACES:

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For outdoor use, clean the entire surface by mechanical means, e.g. high-pressure water jet. Make sure that the substrate is solid and firm. Check the state of the previous paintwork, eliminating cracked and/or not perfectly adhered parts. Repair imperfections and proceed as indicated for new surfaces.

### SPECIAL CONSIDERATIONS FOR WELL MAINTAINED MEDIA

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#### CONCRETE

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The surface must be dry and have the necessary air maturing time (minimum 4 weeks). The substrate must comply with the requirements of the standard for concrete UNE-EN ISO 1504-2, in its performance requirements for coatings. Then apply a first coat of TKROM IMPRIMACION CEMENTO PINTURA AL SILICATO.

#### MORTARS

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Remove efflorescence and alkalinity by means of suitable products, e.g. treatment with hydrochloric acid (salfuman) diluted with water, apply a first coat of TKROM IMPRIMACION CEMENTO PINTURA AL SILICATO.

#### FIBROCEMENT

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Eliminate alkalinity according to mortar considerations. Then apply TKROM IMPRIMACION CEMENT SILICATE PAINT.

#### POROUS GYPSUM:

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In order to prevent excessive absorption in subsequent painting, apply a coat of TKROM IMPRIMACION YESO PINTURA AL SILICATO.

#### FRAGILE GYPSUM:

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To strengthen the external layer by creating a resin grid that also allows transpiration, reduces absorption and facilitates subsequent painting, apply a coat of TKROM IMPRIMACION YESO PINTURA AL SILICATO.

#### MASONRY PLASTERING AND RENDERING:

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The state of the substrate must comply with the standard for mortars UNE-EN 998-2, and following its specifications, the adhesion value to the substrate must be in accordance with that specified in the CE marking of the substrate manufacturer. In no case should it be less than 0.2 N/mm<sup>2</sup>. The average value must be 0.3 N/mm<sup>2</sup>.

#### ANCIENT PAINTINGS:

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The quality of old coatings is important. Their adhesion must not be less than 0.7 N/mm<sup>2</sup>, and the average value in samples must be greater than 1 N/mm<sup>2</sup> (UNE-EN ISO 1504-2 standard). Clean the entire surface with a steam jet or high-pressure water jet. In case of glossy paints, open the pore with mechanical means and proceed as new surfaces.

## SPECIAL CONSIDERATIONS FOR SUPPORTS IN POOR CONDITION:

### BLACKENING CAUSED BY MOULDS AND ALGAE:

Remove and disinfect by vigorously scrubbing the stains with a brush using household bleach. Then treat the surface with TKROM LIMPIADOR REFORZANTE.

### SALITRE:

Scraping with a brush or machine polishing and subsequent chemical treatment with hydrochloric acid (Salfuman) diluted with 10 parts water.

### OLD PAINTS WITH POOR ADHESION:

In case of adhesion of less than 0.7 N/mm<sup>2</sup> (UNE-EN ISO 1504-2 standard), use suitable mechanical means to remove the old paint. The substrate must be suitably prepared to accept the new finish. Proceed as for new substrates.

### INCONSISTENT SURFACES:

Surfaces with pathologies such as chipping, cracking, chalking, blistering, etc., will need to be treated by completely removing the existing paint by mechanical means.

## APPLICATION SYSTEM

SYSTEM	PRODUCT	THEORETICAL PER. DILUTION		LAYERS
<b>PRIMER</b> (Plaster)	TKROM IMPRIMACION YESO PINTURA AL SILICATO	3-5 m <sup>2</sup> /L	Ready to use	1 o 2
<b>COATING</b> (Cement, Concrete, Fibre Cement)	TKROM IMPRIMACION CEMENTO PINTURA AL SILICATO	14-18 m <sup>2</sup> /L	Ready to use	1 o 2
<b>COATING</b> (Substrates with micro-organisms)	TKROM LIMPIADOR REFORZANTE	n.a.	No dilution	1 o 2
<b>PRIMING</b>	PINTURA AL SILICATO TKROM SIL	9-11 m <sup>2</sup> /L	<15% IMPR. SIL CEMENT	1
<b>FINISH</b>	PINTURA AL SILICATO TKROM SIL	6-8 m <sup>2</sup> /L	< 5% IMPR. SIL CEMENT	3

## CONDITIONS OF APPLICATION

<b>Substrate and Ambient Temp.</b>	Min. +5°C / Max. +35°C
<b>Ambient humidity</b>	Max. 80% of the total
<b>Humidity Substrate</b>	Dry substrate with humidity < 5%. Cement mortars, allow to set completely (28 days minimum). Cementitious based products, allow to dry for at least 4 days before coating.
<b>Rocio Point</b>	The substrate temperature must be at least 3°C above the dew point to reduce the risk of detachment or efflorescence.

## RECOMMENDATIONS FOR IMPLEMENTATION

<b>Product preparation</b>	Stir until the product is well homogenised.
<b>Method of application</b>	Brush, roller and spray application. It can be applied by brush, short nap roller or airless spraying. For airless spraying, use the following: 150 bar pressure, 0.38-0.53 mm nozzle, application angle 50°-80°.
<b>Preparation</b>	Shake to homogenise the product. Adjust the viscosity with water. The second coat of the product should be applied perpendicular to the first coat to achieve optimum opacity.

## ADDITIONAL DATA

<b>Health and safety</b>	For any information concerning safety issues in the use, storage, transport and disposal of this product, users should consult the labelling and the most recent version of the MSDS, which contains safety, ecological and toxicological information on the product.
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Safety Data Sheet: Please refer to the most recent version. LER CODE: 08 0112 | WASTE TYPE: NON-HAZARDOUS

<b>Storage</b>	The stability of the product in its original unopened containers, at ambient temperatures of not more than 30 °C and not less than 5 °C shall be 24 months from the date of manufacture. Storage shall be in a cool, dry place, in their original containers, tightly closed, undamaged and protected from frost and direct sunlight.
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<b>Tariff heading</b>	TARIC code: 3209 10 00
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<b>NOTE</b>	Note: The data indicated in this technical data sheet may be modified according to possible variations in formulation and in any case they express indicative values which do not exempt from carrying out the appropriate tests of suitability of the product for a specific job.
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