

SurfaSil Kirei

Photocatalytic mineral layer

Product Description

SurfaSil Kirei is a photocatalytic mineral coating with a matte finish, highly permeable. It is an environmentally friendly mineral coating that uses photocatalytic pigments to reduce harmful gases and odors. Other key features include water repellency, high vapor permeability, durability and antimicrobial properties against algae, fungi, spores and surface contaminants. Provides exterior protection for buildings while contributing to the degradation of nitrogen oxide pollutants in the atmosphere. When used indoors, it improves air quality by eliminating odors and other organic pollutants. The water-repellent groups line the pores of the paint and prevent the penetration of liquid water, but allow the removal of vapors. It is available in white, but can also be tinted in earth tones, exclusively with inorganic dyes, for high durability over time. The photocatalytic activity of SurfaSil Kirei

is certified

and Nanotechnology "Demokritos".
How to use

Suitable for use outdoors and indoors on new or previously painted mineral surfaces such as concrete, lime, plaster and mineral tiles. Ideal for areas with high levels of pollution, such as cities, factories, etc., and for indoor spaces with poor air quality. Also recommended for protection against mold and algae in areas with high humidity and vapor condensation.

BENEFITS

- ☆ Reduces toxic gases (e.g. NOx, VOCs) and organic pollutants.
- ☆ Light-resistant
- ☆ Resistant to algae and fungus growth
- ☆ Durability against weather and UV radiation
- ☆ Environmentally friendly, low VOC content
- ☆ Photocatalysis with both solar and indoor artificial light
- ☆ Self-cleaning effect
- ☆ Water repellent (repels water)
- ☆ Extremely permeable to water vapor
- ☆ Excellent adhesion to mineral substrates
- ☆ Alkali resistant
- ☆ Non-flammable
- ☆ Matte mineral look

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Technical specifications

Type	Mineral, silicone-based
Color	White - can be tinted with inorganic dyes
Smell	Characteristic
Density	$1.47 \pm 0.05 \text{ g/cm}^3$
Thinner/Cleaning Solvent	Water
Thinning ratio (% v/v)	Up to 5% with water
Application temperature	From 5°C to 35°C
Drying time	Approx. 1h @ 20°C 3h
Minimum recoat interval	@ 20°C
Maximum recoat interval	8h @ 20°C
pH	11.5 ± 0.5
Viscosity	$100 \pm 15 \text{ KU}$
Water vapor permeability (EN ISO 7783:2011)	$S_d < 0.01 \text{ m}$, class V1 ($S_d < 0.14 \text{ m}$ high)
Water absorption coefficient	$W < 0.15 \text{ kg/m}^2 \cdot \text{h} \cdot 0.5$, class W2
	$< 0.93 \text{ g/L}$
Gloss at 85°	5-6
	Low/Matt (< 10)

(*) Dry-to-recoat time is prolonged under low temperature and high humidity

Surface preparation

All surfaces must be clean, dry, free from dust, oil, salts, grease, rust and loose residues. New cement substrates or new masonry must be cured for at least 4 weeks before application. Damaged substrates, cracks and holes must be repaired with

suitable repair materials from NanoPhos. SurfaSil Primer must be applied first to equalize different absorption levels or to improve adhesion on already painted surfaces.

Application instructions

Mix well before use. After one coat of SurfaSil Primer has been applied and allowed to dry for 6-8 hours, apply at least two coats of SurfaSil Kirei, thinned if necessary with maximum 5% water. Apply with a roller, brush or spray. On surfaces where waterproofing products have been applied or on surfaces already modified, it is recommended to carry out a test on a small area before full application, to check adhesion. During

When applying, protect your eyes with safety glasses and your hands with gloves.

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With suitable gloves. To be kept, cover the areas near you that do not need to be painted (furniture, windows), marble, ceramic tiles, doors etc.). Do not apply if rain is forecast or if the substrates are wet or be rb inti. Protect exposed surfaces from exposure to strong winds.

Coverage rate

8-10 m²/L, depending on the absorption capacity of the applied surface.

Storage

Store in the original sealed packaging, in a well-ventilated space, at a temperature strictly between 5°C and 35°C, away from sunlight and frost, for 12 months. Improper storage conditions may affect the quality of the product.

Conditions we need to be responsible of deposit CAN to make quality of the product.

Health and Safety

Read the product label before use. The safety data sheet is available on the NanoPhos website, www.NanoPhos.com, so up o a te be so lic ita tco nta c t nd Na no Pho sp rin e ma il at the address: info @ Na no Pho sc o m or call them by phone at: (+30) 2292069312.

Available quantity

• 3L Plastic Container

• 10L Plastic Container

Available in white. Other colors available upon request.

The recommendations in the Technical Data Sheet for the use of NanoPhos products are based on our scientific knowledge, laboratory studies and your long-term experience. The information provided should be considered as indicative and subject to constant review, depending on the specific conditions and of each practical application. The suitability of the product must be examined in each case for the specific use, and the final user takes the whole amount and exclusive responsibility for any side effects that may occur as a result of use. The correctness of the product. This edition of this technical data sheet is not subject to automatic previous version.

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regarding the same product. For more information, please contact NanoPhos:

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