# **Technical Data Sheet**

## KEIM Soldalit®-arte

## Titanium dioxide-free exterior paint for a particular colour depth



## 1. Product description

KEIM Soldalit-arte is a sol/silicate-based titanium dioxide-free exterior paint. This formulation, without titanium dioxide but with absolutely lightfast inorganic pigments and mineral extenders, emphasises the original character and plastic texture of the substrate and gives rise to coatings with a particular colour depth and plasticity. The binder combination of silica sol and water glass makes it possible to apply silicate coatings not only to mineral but also to a wide range of organic substrates. KEIM Soldalit-arte also complies with DIN 18 363 sect. 2.4.1 (silicate emulsion paint).

## 2. Field of application

KEIM Soldalit-arte is suitable for the coating of sound, organic and mineral substrates, and mixed substrates. Exceptions are wood, plastoelastic coatings, saponifiable existing paints (for example certain oil-based paints) and non-wettable substrates (for example lacquers).

Because of the omission of the homogenising white pigment titanium dioxide, KEIM Soldalit-arte is particularly suitable for the renovation of old structures and landmarked buildings to reproduce "historic atmosphere". KEIM Soldalit-arte is as well recommended in the field of new buildings and modern architecture for exterior wall coatings with special requirements regarding colour depth and colour effect.

## 3. Product properties

KEIM Soldalit-arte is an extremely long-life exterior sol/silicate-based paint, which is formulated without titanium dioxide as a homogenising, opaque pigment. Coatings with KEIM Soldalit-arte allow the texture of the substrate and the brightness of the absolutely lightfast, inorganic colouring pigments to show through unaltered. The coating has increased colour depth and vibrancy and a particular colour effect is obtained.

- titanium dioxide-free formulation
- · accordingly reduced wet hiding power
- increased colour depth and brightness
- emphasises the texture and other features of the substrate
- mineral matt character
- non-film-forming
- non-flammable (DIN 4102-A2)

- absolutely inorganic, lightfast pigments
- UV-resistant in all components
- high weathering resistance
- resistant to industrial fumes and acid rain
- anti-static
- highly water-repellent (despite darkening in colour in rain)
- extremely vapour permeable
- hinders fungal and algal growth thanks to ideal moisture balance
- environmentally friendly neither solvents nor pot preservatives added

#### **Material characteristics**

• org. content: < 5%

• specific weight: approx. 1.50 g/cm³

• pH-value: approx. 11

• Light-fastness of colour pigment: A1

(Fb-Code acc. to BFS instruction sheet No. 26)

#### Classification to DIN EN 1062-1

• water vapour diffusion density:  $V \sim 2000 \text{ g/(m}^2 \cdot \text{d)}$ 

diffusion-equivalent

air-layer thickness:  $s_d \le 0.01 \text{ m (Class I)}$ 

to DIN EN ISO 7783-2

water permeability

rate (24 h):  $w < 0.1 \text{ kg/(m}^2 \cdot h^{0.5})$ 

(Class III)

#### **Colour shades**

Natural white pigmented with lithopone, raw white (unpigmented) and titanium-free colour shades from KEIM's Palette Exclusiv and Avantgarde range. Tint only with KEIM Soldalit monochrome shades. The visual impression of the individual colour shade is naturally influenced by the particular substrate. For this reason and because of the titanium-free formulation, slight variations in shade compared to the colour swatch or in comparison of different substrates to each other are possible depending on substrate and colour shade.

## 4. Application instructions

## Substrate preparation

The substrate must be sound, dry, non-chalking, clean and dust-free. Remove any loose areas of existing coatings mechanically or by water jetting. Fill and texture-match any defects with a suitable touch-up material. Sinter layers of new renders have to be removed with KEIM Ätzflüssigkeit as prescribed. Areas

of new renders (repairs) should in general be pretreated with KEIM Ätzflüssigkeit according to the technical data sheet. Highly absorbent mineral substrates should be pretreated with KEIM Soldalit-Fixativ. For touched-up substrates and substrates with textural variations or hairline cracks, use KEIM Soldalit-arte-Grob as priming coat instead of KEIM Soldalit-arte.

## **Application**

Application by brush is particularly recommended. The application should always be done with special diligence.

<u>Priming coat:</u> apply KEIM Soldalit-arte normally undiluted, or dilute by up to approx. 5%, or for highly absorbent substrates, by up to max. 10%, in both cases with KEIM Soldalit-Fixativ.

Finishing coat: KEIM Soldalit-arte, apply undiluted.

### **Application conditions**

Ambient and substrate temperature > +5°C. Do not apply in direct sunlight or onto sun-heated substrates. Protect coated surfaces from direct sunlight, wind and rain during and after application.

#### **Drying times**

A drying time of at least 12 hours must be left between coats

#### Consumption

Smooth substrate, two coats of KEIM Soldalit-arte, per m<sup>2</sup>: approx. 0.45 kg/m<sup>2</sup> KEIM Soldalit-arte

The stated consumption values are for guidance and depend on the nature of the substrate and the application method. Exact consumption values can only be determined by painting trial areas on the structure to be coated.

## **Cleaning of tools**

Clean with water immediately after use. During breaks, store tools in the paint or in water.

#### Third-party additives

To preserve the specific characteristics of the KEIM Soldalit-system, no other substances may be added.

# 5. Packaging

5 kg and 25 kg containers

## 6. Storage

12 months in sealed container under cool, frost-free conditions. Protect from heat and direct sunlight.

# 7. Hazardous substances ordinance class

n/a

## 8. Transport hazard class

n/a

# 9. Disposal

EC Waste Code no. 08 01 12.

Any residues must be emptied out of containers before recycling.

#### 10. Safety instructions

Provide appropriate protection for surfaces which are not to be treated (e.g. glass, natural stone, ceramics, wood etc.). Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with plenty of water Protect the eyes and skin from splashes. Keep out of reach of children.

Product code: M-SK 01

The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to provide assistance in the selection of our products and do not establish a contractual relationship. In particular, they do not release those purchasing and applying our products from the duty of establishing for themselves, with due care, the suitability of our products for the intended application. Standard building industry practices must be complied with. We retain the right to make modifications to improve the products or their application. This edition supersedes all earlier editions.