

KEIM Coolit-AP heat-reflective and lightfast mineral paint



1. Product information

KEIM Coolit-AP is a heat-reflective mineral silicate paint system for facades according to EN 1062-1 for use in subtropic/tropic conditions. Very suitable for exposure to strong sun. It offers water repellency, high vapor permeability and forms a chemical bond with the mineral substrate. KEIM Coolit-AP is made using pure inorganic mineral fillers, absolutely lightfast inorganic pigments, additives and potassium silicate binder.

2. Field of application

KEIM Coolit-AP can be used for all mineral, absorbent substrates. Due to its outstanding product characteristics, KEIM Coolit-AP is suitable for old and new facades. In combination with the products of the KEIM Coolit-AP system various application areas are possible.

3. Product properties

KEIM Coolit-AP is a longlife exterior silicate-based paint with a modified potassium silicate binder. KEIM Coolit-AP has a high coverage and contains only absolutely lightfast inorganic pigments. KEIM Coolit-AP protects the substrates from environmental influences.

- Water vapour permeable
- Lightfast
- Heat-reflective
- Easy to clean
- Easy to overpaint
- Non-flammable
- Non film-forming
- Mineral matt
- All components UV resistant
- High resistance to weathering
- Resistant against industrial fumes and acid rain
- Water repellent
- No solvents added
- Ease of application
- Resists extreme climatic conditions
- Hinders mould and fungal growth under certain conditions

Material characteristics

- specific weight: approx. 1.4 g/cm³
- pH-value: approx. 11
- lightfastness of colour: A1
(Fb-Code acc. to BFS-instruction sheet No. 26)

Classification to DIN EN 1062-1

- water vapour transmission rate: $V > 1500 \text{ g/m}^2\text{d}$
diffusion equivalent airlayer thickness: $s_d = 0.01 \text{ m}$
Class I ($s_d < 0.14$)
to DIN EN ISO 7783-2
- liquid water permeability rate (24 h): $w = 0.12 \text{ kg/m}^2\text{h}^{0.5}$
to DIN EN 1062-3
- gloss at 85°: 0.5
matt (≤ 10)
to DIN EN ISO 2813

Colour Shades

White and according to the KEIM Palette Exclusiv with specials available. On-site tinting only with KEIM Coolit-AP Monochrome.

4. Application

Substrate Preparation

The substrate must be sound, dry, absorbent, clean, dust- and grease-free. Loose and brittle parts, dirt, oily and greasy materials, moss, algae and other surface contaminants are to be entirely removed by suitable mechanical and/or chemical means. Old, film-forming coatings which may hinder the vapor diffusion and/or which are not well adhering are to be removed with KEIM Dispersionsentferner or by mechanical means. Well adhering organic old coatings are to be coated with KEIM Contact-Plus as bridging coat prior to subsequent applications of KEIM Coolit-AP. Not suitable are plasto-elastic old coatings or coatings and substrates susceptible to saponification.

For strongly absorbent or sanding substrates a pretreatment with KEIM Coolit-AP-Dilution, undiluted, is recommended. Possibly existing sinter layers on new renders are to be removed with KEIM Ätzflüssigkeit (Lime remover) according to manufacturers instructions. (Partial) render repairs are generally to be treated with KEIM Ätzflüssigkeit (Lime remover) acc. to the prescriptions in the technical data sheet. Before coating areas subject to strong weathering or environmental stress a pretreatment with KEIM Silan-100 or KEIM Silangrund is recommended.

Application

KEIM Coolit-AP should be applied as a two coat process onto unpainted surfaces, and applied by brush or roller, working well into all surfaces.



Base coat

KEIM Coolit-AP, diluted by, depending on the absorbency of the substrate, up to 20% with KEIM Coolit-AP-Dilution (25 kg and max. 5 l Dilution).

Top coat

KEIM Coolit-AP, undiluted or with up to 5 % with KEIM Coolit-AP-Dilution, after a minimum drying period of 12 hours.

When larger structural differences and/or numerous hairline cracks (≤ 0.5 mm) exist, KEIM Contact-Plus, applied by brush, should be used as base coat.

Please note that under certain conditions a three-layer system may be required. Further information upon detailed request available.

Working conditions

Air and surface temperature: $> 5^{\circ}\text{C}$

Do not apply under direct sun or on heated surfaces. Substrates should be protected during and after application from direct sun, wind and rain.

Drying times

A drying time of 12 hours minimum is to be respected between the different coats of KEIM Coolit-AP and/or KEIM Contact-Plus.

After a pretreatment with KEIM Silangrund the first coat should be applied after approximately 4 hours.

Consumption per 1 m²

For two coats onto a smooth surface approx. 0.4 kg KEIM Coolit-AP and 0.05 l KEIM Coolit-AP-Dilution. These consumption figures are typical values and strongly depend upon the texture of the substrate as well as on the application procedure. Exact consumption ratios may only be defined by trial applications on the project.

Tools

Clean immediately after use with water. During work pauses the tools should be kept in the product or in water.

Mixing with other products

In order to maintain the specific features of KEIM Coolit-AP and the related system products, they may not be mixed with other products or additives nor may they be diluted with water.

5. Packaging

5 kg and 25 kg containers

6. Storage

Approx. 12 months, if kept cool, but frost free in tightly closed containers. Protect from heat and direct sun radiation.

7. Disposal

EC Waste Code No. 08 01 12.

Any residues must be emptied out of containers before recycling.

8. Safety instructions

Provide appropriate protection for surfaces which are not to be coated (e.g. glass, natural stone, ceramics 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. Contains Propiconazole. May produce an allergic reaction.

Product code: M-SK 01

Please refer to EC Safety Data Sheet.

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.

