

TECHNICAL DATA SHEET

KEIM FIXATIVE + CONSOLIDANT

1. PRODUCT DESCRIPTION

KEIM Fixative is a clear binder, thinner and consolidation agent made from pure, liquid potassium silicate. It dries completely clear and develops a natural mineral matte finish which leaves the masonry surface completely natural in appearance without altering existing colors.

2. FIELD OF APPLICATION

Use KEIM Fixative as a binder and dilution for pure silicate-based, two-component paint systems, KEIM Purkristalat and KEIM Décor Paints. It may be used as a dilution for KEIM Granital. Also use KEIM Fixative as a vapor permeable primer on very porous masonry surfaces to reduce absorbency and extend coverage of subsequent mineral topcoats. It also helps to minimize variable porosity across surfaces that are highly porous resulting in a more uniform topcoat appearance. Use KEIM Fixative as an anti-dusting finish on interior or exterior brick, stone, stucco, concrete or any masonry surfaces. Fixative "ties down" loose masonry dust and elements and consolidates masonry to eliminate future dusting. Use KEIM Fixative as a mild consolidant for friable and damaged masonry, brick and stone. The penetrating action strengthens and restores weakened and decayed masonry by rebonding the molecular structure on a cellular level. It fills voids and consolidates them. It is not a sealer as the stone remains breathable. but it will limit the absorption of ambient moisture to a slower rate, then that of an untreated stone.

Recommended Uses:

- Interior and exterior
- Above grade
- Aged, decayed and friable masonry and brick
- Cast and precast concrete
- Natural stone
- Stucco surfaces

3. PRODUCT PROPERTIES

KEIM Fixative penetrates and bonds permanently with the substrate, is highly

moisture vapor permeable, extremely resistant to weathering and is incombustible. KEIM Fixativ contains no organic additives.

- Forms covalent chemical bonds, similar to those in original substrate—no synthetic polymers
- Extremely weather resistant
- Non-film forming, will not develop a hard crust
- Extremely moisture vapor permeable
- High binding power and fixing action
- Non-flammable
- UV resistant
- Hinders fungal and mold growth
- Resistant to acid rain and pollution
- Low viscosity allows deep penetration
- Environmentally friendly with low environmental impact

Technical data

Specific weight	approx. 1.17 g/cm³
Penetration Depth	Class II:= 10 mm
Active Content	100%
pH value	11.3
Vapor Permeability ASTM E 96	93+ perms
Solubility in water	Fully miscible
VOC	< 1 g/liter

Color: Clear (tea colored)

Environmental Compliance

EPA	YES
LEED	YES
CARB	YES
SCAQMD	YES

4. SPECIFICATIONS/SYSTEMS

For proper performance, porous surface must be thoroughly soaked and saturated with Fixative. Depending on surface porosity, level of decay, etc. multiple and successive applications may be required.

5. SURFACE PREPARATION

The mineral substrate must be absorbent, sound, dry, clean and free from dust and grease. Loose areas, dirt, oily substances, release agents, curing compounds, moss and algae must be completely removed.

6. APPLICATION

<u>Pretreat highly absorbent or sanding surfaces</u> or as a consolidant:

Dilute Fixative with clean water in ratio of 1:1, 1:2 or 1:3. Apply diluted Fixative by flooding surface with brush, roller or airless spray. Multiple coats may be required if the surface is extremely porous, sanding or decayed.

<u>To mix with Purkristalat or Décor Paints:</u> Soak 5 kg of color powder in 4 liters of KEIM Fixativ.

Anti-dusting applications:

Dilute Fixative with clean water in a ratio of 1:3. Apply diluted fixative by flooding surface with brush, roller or airless spray. Multiple coats may be required if surface is extremely porous, sanding or decayed.

<u>To dilute Purkristalat, Décor Paints, or Granital:</u>
Refer to relevant technical data sheet.

Application conditions

Ambient and substrate temperature: 40°F and rising. Do not apply in direct sunlight or on sunheated substrates. Equipment and tools must be clean. The surface of the building material must be clean, dry and absorbent and may have to be cleaned beforehand. The quantity to be applied by flooding depends on the absorbency of the substrate (apply onto trial area). Nonabsorbent surfaces cannot be treated with Fixative. Avoid direct sunlight and exposure to strong wind. Protect coated surfaces from direct sunlight, wind and rain during and after application for a minimum of 12 hours.

Drying times

Drying times are temperature, humidity and coverage dependent.

 @ 40-50°F
 @ 50°F +

 Touch:
 4--6 hour
 2--4 hours

 Reapply or topcoat:
 10--24 hours
 10 hours

Cleaning

Clean spills, spatters, hands, and tools immediately after use with water.

Coverage*

SUBSTRATE	COVERAGE*
Cast or Pre-Cast Concrete	250—300 SF/GAL
Fiber Cement Siding	250—300 SF/GAL
Portland Stucco	125—175 SF/GAL
CMU Block (smooth) and brick	75—100 SF/GAL
CMU Block (split faced or fluted)	25—50 SF/GAL
Gunite/Shotcrete	75—125 SF/GAL
Brick/Natural Stone Masonry	200—250 SF/GAL

*Stated values are based on our experience on smooth surfaces. Surface texture, porosity, application conditions and type of equipment used will all vary consumption. Only a test application, using desired mixing ratio and under production conditions will fore-cast consumption of the system components accurately.

7. PACKAGING

4-liter (1.05 gal) and 24 liter (6.34 gal) Steel Pail

8. STORAGE

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

9. DISPOSAL

Dispose of completely emptied containers in accordance with local, state and federal waste regulations.

HAZARDOUS SUBSTANCE CLASS Not Applicable

LIMITATIONS

Do not apply to polished stone or previously painted surfaces. Not for use below grade.

10. SAFETY INSTRUCTIONS

KEIM Fixative is alkaline.

Provide appropriate protection for surfaces which are not to be treated (e.g. glass, sidewalks, pavers, landscaping, 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.

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.

The information and recommendations set forth in this Technical Data Sheet are based upon tests conducted by or on behalf of KEIM Mineral Coatings. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult http://www.keim-usa.com/Technical-Data-Sheets for the latest in product technical information.

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