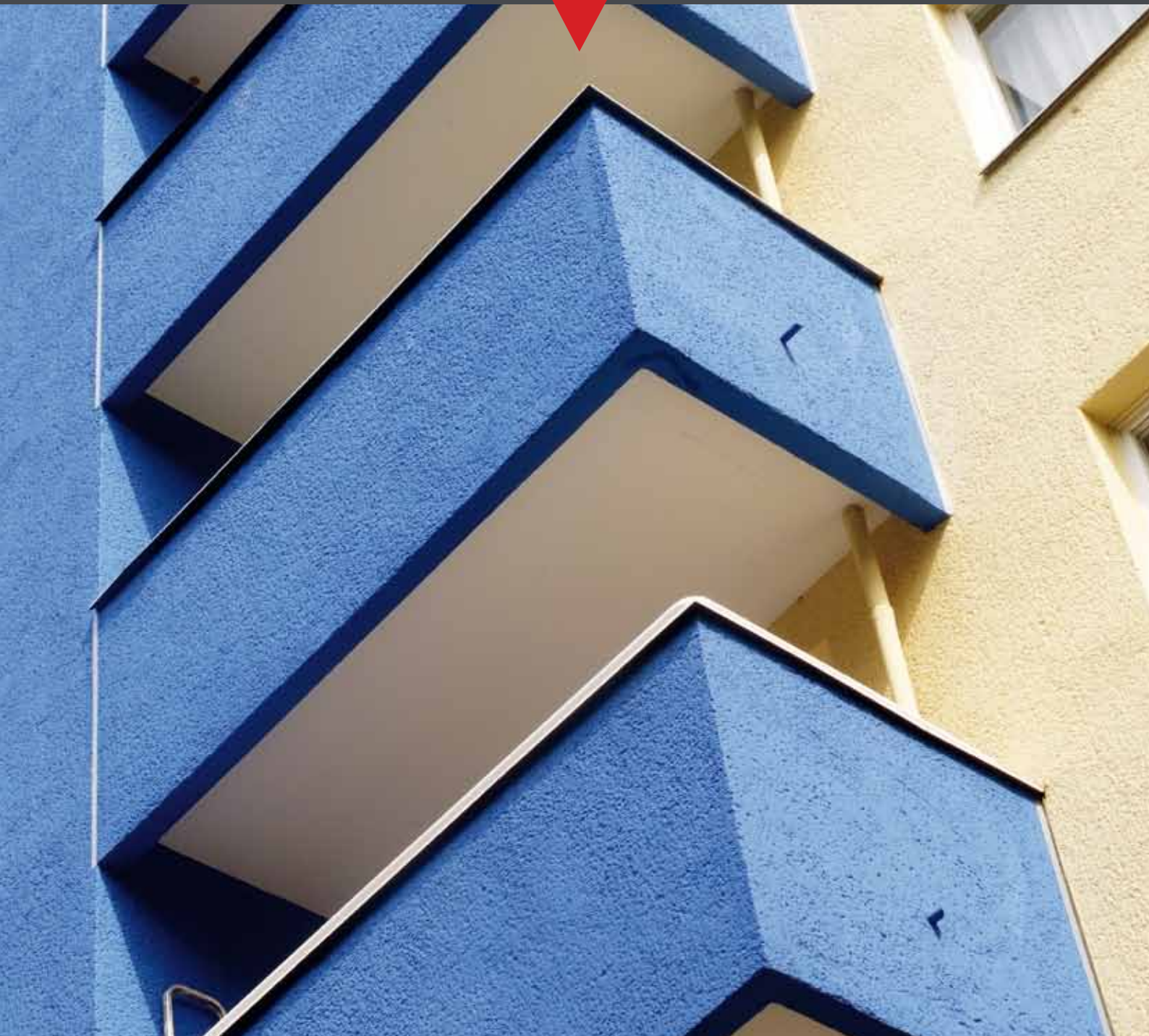


**KEIM**



# KEIM SOLDALIT<sup>®</sup>

SOL-SILICATE FACADE PAINT  
FOR UNIVERSAL USE





# THE BEST PAINT FOR EVERY SUBSTRATE

**COLOUR STABLE** Keeps the colour shade over decades, even dark tones.

**BINDER STABLE** The paint keeps its character. No brittleness, no flaking.

**WEATHER RESISTANT** Water, weathering, pollutants. Nothing matters to Soldalit.

**ECONOMICAL** Easy application. Very long service life.

**ENVIRONMENTALLY SOUND** Purely mineral, no pollutants.



# KEIM SOLDALIT®. REVOLUTION IN SILICATE TECHNOLOGY

This mineral sol-silicate paint invented by KEIM provides coatings of sensational quality. KEIM Soldalit® mineral paint definitely has the edge over common facade paints when it comes to longevity and having the ideal properties in terms of structural physics. With KEIM Soldalit® are the various benefits of mineral coatings also given to organic existing coatings

The pigments used are purely mineral. Even intensive colours keep their original shade for decades. Moreover, you recognize KEIM paints by their incomparable matt look and the natural beauty of their surface.

At KEIM the colour shades are mixed by experienced specialists order-related or individually according to the customer's colour samples. Reference samples are stored from each of the custom-made colours and thus available for reorders.

**Easy to apply.**  
**Universal use.**  
**Outstanding durability**  
**Naturally beautiful.**





# KEIM SOLDALIT®. MINERAL PAINT FOR EVERY KIND OF A SUBSTRATE

Something that has been formerly inconceivable has become reality with KEIM already for a long time: A silicate facade paint with all of the benefits of a classic, silicate paint in combination with the range of application and easy handling of normal dispersion paints.

So the most various advantages of silicate paints are now possible onto existing coatings with dispersion paints. Even mixed substrates are no problem for KEIM Soldalit®. The unique, mineral binding agent provides an absolutely strong bond with almost any substrate.

## **SOL-SILICATE PRINCIPLE**

KEIM Soldalit's universality is based on the sol-silicate principle invented by KEIM. A special combination of silica sol and potassium silicate creates a binding agent that is not only very good for mineral substrates but also particularly suitable for dispersion bound existing coatings.

## **SAFE AND EASY**

It is very easy to apply KEIM Soldalit®. Like any other ready-to-use paint you apply it directly out of the bucket. KEIM Soldalit® dries homogeneously and has a fantastic coverage.

## **RECOMMENDED FOR ORGANIC EXISTING COATINGS**

KEIM Soldalit® stops the binder disintegration of organic existing coatings that is caused by UV radiation and retains the structural and physical properties of the facade since the silicate binder is absolutely UV stable. Repeated painting with synthetic paint material like e.g. dispersion paints impairs the breathability of a wall with each paint layer. But KEIM Soldalit® retains the existing permeability.

# EXTREMELY LONG LASTING AND THUS ESPECIALLY ECONOMICAL

Good craftsmanship is shown by a long-term quality determined by solid technical performance and a high-class coating material. KEIM Soldalit® is made exactly for that. Selected raw materials and a formula engineered with 135 years of expertise and composed with technical diligence in the KEIM manufacture. Paints from the tradesmen for the practicing trade.

## **MINERALS LAST FOR GENERATIONS**

The oldest buildings of mankind are made of stone. Because minerals are very stable and resistant against all kind of weather influences. This is why mineral paints from KEIM are so long lasting. No spalling, no flaking, no runners from water. Coatings with KEIM Soldalit® remain for decades and age gracefully. So craftsman and builder can enjoy their piece of work for years.

## **STRONG BOND WITH THE SUBSTRATE**

KEIM invented a sol-silicate binding agent that forms an insoluble bond with mineral and organic substrates and therefore, provides multi-purpose uses.

## **MINERALS ARE HIGHLY COLOUR STABLE**

Moreover, KEIM uses only mineral pigments that are colourfast for decades. This means, no fading, no change in colour shade.

## **MINERAL COATINGS REMAIN CLEAN**

Minerals are anti-static. They don't get charged and thus attract dirt. If it is hot they do not become soft and tacky so that dirt particles would stick. So dust and dirt do not stick permanently. The mineral surface has a self-cleaning effect.

## **MINERALS ARE UV-RESISTANT**

All synthetic binding agents such as dispersion or resins lose their elasticity over time. Responsible for this is the UV radiation of the sun. KEIM Soldalit®'s sol-silicate binder is not only absolutely UV stable but it also protects and stabilizes the paint layers underneath. The disintegration of the binder is stopped.

„I am happy that it is so easy to refinish over an existing dispersion paint with a silicate paint from KEIM. It means the breathability of the facade is retained in combination with a durable coating.“

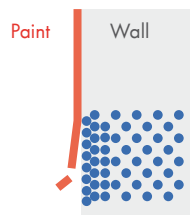
WALTER MEYER, MASTER PAINTER

# KEIM SILICATE PAINTS IDEAL IN TERMS OF STRUCTURAL PHYSICS

## COMMON DISPERSION PAINTS

COMMON DISPERSION PAINTS IMPAIR THE DRYING PROCESS.

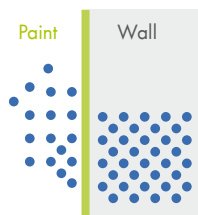
Moisture in masonry cannot escape through a dense dispersion paint layer. The moisture will build up and lead to damages.



## KEIM SOLDALIT®

KEIM SOLDALIT® ALLOWS THE MOISTURE TO ESCAPE .

Moisture in masonry can escape unhindered. The wall remains dry and the paint is not affected.



## DRY FACADES

At first the idea seems to be plausible to seal a facade with a synthetic resin coating against moisture.

However, in practice it does not work. Water will enter the facade wall especially under high wind loads and as soon as the paint has aged a little bit. The moisture then will only very slowly escape through the synthetic layer and someday the paint will start to flake off and water pockets occur.



A good water vapour permeability is particularly important from the standpoint of buildings physics. KEIM mineral paints are highly vapour permeable because they are based on a silicate binding agent. This way moisture contained in the structure can be released fast and unimpeded to the outside. It avoids moisture accumulations between coating and substrate that would entail damages. So the facade is specially protected from frost and water damages.

KEIM paints also dry faster and because of this have minimal dew moisture on the facade which reduces the main reasons for algae and fungi growth.



**CLEAN FACADES**

KEIM silicate paints remain clean for a long time period. Contrary to synthetic paints they are not only less susceptible to condensation but there is also no electrostatic charging that would attract dirt particles like a magnet.

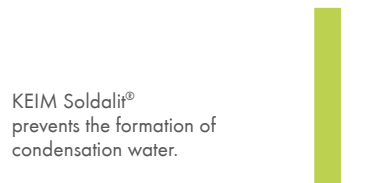
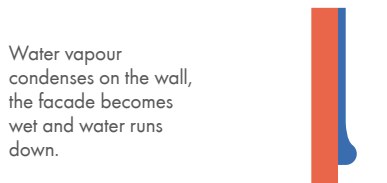
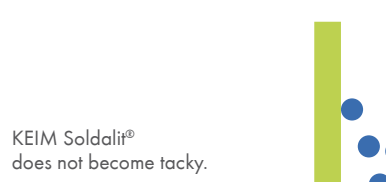
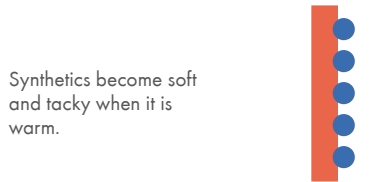
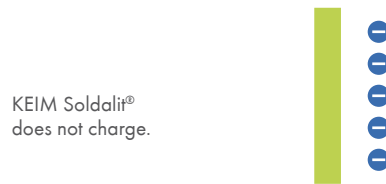
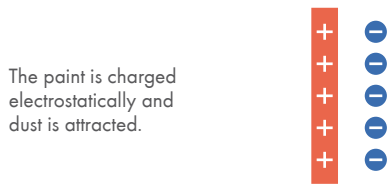
Moreover, synthetics become soft when the weather is hot, i.e. they become „tacky“ providing ideal conditions for dirt particles to become stuck and collect in larger numbers on the surface. KEIM mineral paints don't have that problem. KEIM silicate paints are anti-static and non-thermoplastic. This is why they remain clean and beautiful for a long time.

**AVOID SOILING**

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DISPERSIONS ARE MADE OF SYNTHETICS AND PROPERLY ATTRACT DIRT PARTICLES FROM THE ATMOSPHERE.

KEIM SOLDALIT® IS MINERAL AND DOES NOT PROVIDE ANY CONTACT SURFACE FOR DIRT.



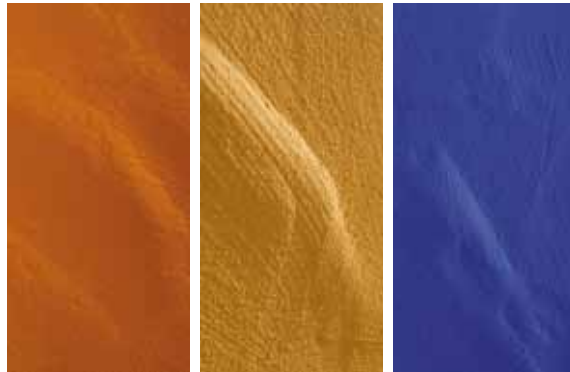
# KEIM SOLDALIT®-ARTE FOR HOUSES THAT HAVE A SOUL

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## WHITE MAKES THE DIFFERENCE

Modern paints appear smooth and homogeneous due to their white parts. The high-performance white pigment „titanium dioxide“ is added to almost all modern paint materials. Titanium dioxide has such an enormous covering power that it has become standard long ago and thus changed our perception for colours.

In most cases the uniform effect is wished-for. But colours without titanium dioxide have an individual, very vibrant aesthetic and the colour pigments are particularly accented.



## MORE VIBRANCY

The colour pigments in titanium dioxide-free paints are not masked by the white pigment. The pigments can develop space and depth in the clear binding agent and display their brilliance and vibrancy which again strongly emphasizes the original texture and materiality of the substrate. Changing light and daytimes provide changing colour impressions. And when natural paints become wet they appear even darker and stronger.

## FOR HOUSES THAT HAVE A SOUL

KEIM Soldalit®-arte totally dispenses with the unnatural pressure for sterile perfection and accentuates the natural. The interaction of colours and changing light conditions on the facade creates different atmospheres and is a forever enchanting eyecatcher. KEIM Soldalit®-Arte stands for depth and power of colours, for preservation of specific features – a unique atmosphere, an unadulterated colourfulness and an incomparable, authentic colour impression.

## COMPARISON: WITH AND WITHOUT TITANIUM DIOXIDE

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Two powder blends, both of the same shade. Right: Without titanium dioxide. Left: With titanium dioxide. The loose powder shows no visual colour difference. When smoothly pressed down it shows the higher luminosity of the titanium dioxide-free formula.



THE INTERACTION OF COLOURS  
AND CHANGING LIGHT  
CONDITIONS ON THE FACADE  
CREATES DIFFERENT ATMOSPHERES  
AND IS A FOREVER ENCHANTING  
EYECATCHER





# KEIM SOLDALIT®-ME IMPROVES THE AIR.

Facing the continuously growing traffic volume, clean breathing air becomes an ever more valuable commodity. But cities and communities struggle to achieve climate improvements. Up to now, traffic-regulating measures have not really been successful.

## PRINCIPLE OF PHOTOCATALYSIS

Mineral facades can also work as catalyst like ceramic in a catalytic convertor. You only need KEIM Soldalit®-ME and light. This principle is called catalysis: A substance is stimulated by light to initiate a chemical reaction, without being consumed. This activates oxidation processes and organic substances and nitrogen oxides are decomposed.

Thus, facades coated with KEIM Soldalit®-ME are able to promote the decomposition of air pollutants. Plus, the photocatalysis reduces the accumulation of spores. The additional cost compared to common coatings is minimal but the advantage for the air is considerable. A clear plus for people and the environment.

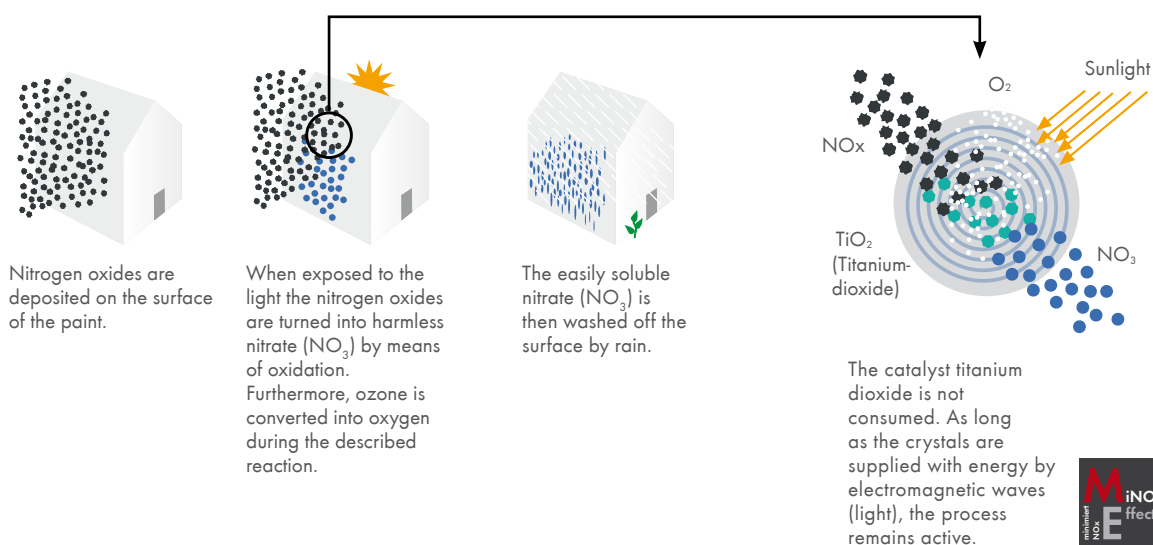
## FUNCTIONAL PRINCIPLE

Specific mineral pigments in KEIM Soldalit®-ME paint are responsible for this chemical process. To add those to common dispersion and silicone resin paints is difficult because their binding agent would become affected entailing sanding and a much shortened longevity of the coating.

Soldalit®-ME's photocatalytic effect was not only tested and proven in the laboratory but also through field trials. The development of nitrogen pressure was observed in a simulated street canyon. Depending on the weather situation and time of the day the nitrogen pressure was clearly reduced, and also the growth of microorganisms.

## CLEAN FACADES WITH ENVIRONMENTAL BENEFIT

This photocatalytic effect can also decompose algae and organic dirt - another advantage besides the already excellent dirt resistance of silicate surfaces. A small commitment for the environment and an extra reward.



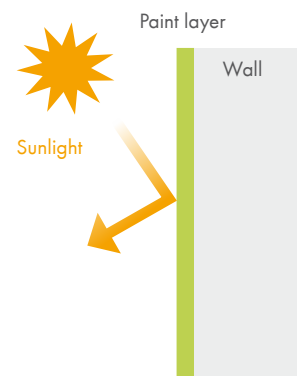


# KEIM SOLDALIT® WITH COOLIT-TECHNOLOGY

Solar radiation can become a problem for facades: Temperature fluctuations entail tensions which may damage the render. Coatings with our KEIM Coolit-Technology have a specific pigmentation and thus absorb clearly less solar energy. They reduce noticeably the thermal absorption of the facade surfaces and temperature-related tensions in the render structure are avoided. KEIM coatings with Coolit-Technology increase the life span of facades with a specific, thermal strain, particularly in case of dark and intensive colour shades.

## COOLIT-TECHNOLOGY

SOLAR ENERGY IS REFLECTED AND THE FACADE REMAINS COOLER.



# KEIM SOLDALIT® PAINT SYSTEM

## KEY FEATURES OVERVIEW

- Universal use: for mineral and organic substrates
- Even improves the quality of organic based existing coating
- Highly durable and colour-stable
- Excellent structural and physical properties
- Moisture-regulating
- Economical
- Environmentally friendly

## SYSTEMS

SYSTEM	KEIM SOLDALIT®	KEIM SOLDALIT®-COOLIT	KEIM SOLDALIT®-ARTE	KEIM SOLDALIT®-ME
EFFECT	Universal use on any facade substrate (old or new).	Less tension in the render structure by reducing solar heating.	Particular colour depth and aesthetics together with a vibrant surface appearance.	Reduces air pollutants, soiling and growth of microorganisms.
TECHNOLOGY	Sol-Silicate Technology	Coolit-Technology	No titanium dioxide	Photocatalysis

## APPLICATION

TOP COAT	KEIM Soldalit®	KEIM Soldalit®-Coolit	KEIM Soldalit®-arte	KEIM Soldalit®-ME
BASE COAT	KEIM Soldalit®	KEIM Soldalit®-Coolit	KEIM Soldalit®-arte	KEIM Soldalit®-ME
FILLING PRIMING COAT	KEIM Soldalit®-Grob	KEIM Soldalit®-Coolit-Grob	KEIM Soldalit®-arte-Grob	KEIM Soldalit®-ME-Grob
DILUTION	KEIM Soldalit®-Fixativ			

## TECHNOLOGY

CLASSIFICATION	Ready-to-use sol-silicate paint according to DIN EN 1062. Complies with the requirements of DIN 18.363, 2.4.1 for silicate emulsion paints.
W-VALUE	Class III , < 0.1
SD-VALUE	Class I, < 0.01 m
COLOUR CODE	A1



**KEIMFARBEN GMBH**

Keimstraße 16 / 86420 Diedorf / Tel. +49 (0)821 4802-0 / Fax +49 (0)821 4802-210  
Frederik-Ipsen-Straße 6 / 15926 Luckau / Tel. +49 (0)35456 676-0 / Fax +49 (0)35456 676-38  
[www.keimfarben.de](http://www.keimfarben.de) / [info@keimfarben.de](mailto:info@keimfarben.de)

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