

TECHNICAL DATA SHEET No. 492

# mineralit Sol-Fassadenfarbe

Colour matching with **einZAmix**



**Type of material**

Premium Sol-Silikat-Fassadenfarbe of quality level A1 based on a combination of potassium silicate and silica sol. Mineral matt 1-component-mineral paint according to VOB DIN 18 363 2.4.1.1 for high weather and colour resistant facade protection.

**Application purpose**

Due to the sol-silicate-technology universally usable for highly water vapour permeable coatings outside. Usable on all unpainted, mineral surfaces such as exterior plaster, silicate plaster etc. For renovation coatings on stable silicone and silicate facade paints or organic based dispersion facade paints (except permanently elastic coating systems). Also appropriate for new paintings on synthetic resin plaster or silicone resin plaster coatings as well as a protective coat within the thermal insulation composite system. einZA mineralit Sol-Fassadenfarbe is especially suitable for painting historic buildings as part of monument conservation.

**Colour shades**

white as well as a range of colour shades obtained by using einZA mix paint mixing system, only mixable with pure mineral (inorganic) light-resistant pigments.

**Protection against algae and fungus**

Due to the special mixture of mineral raw materials, the correct water balance, the special surface structure (silicate grid) and the natural protective function against dirt and virescence due to the high pH value of 11 the algae and fungal growth will be delayed. Two coatings are mandatory. According to the current state of the art, a permanent protection against algae and fungal attack can not be guaranteed.

**Notice**

Intensive colour shades may dry unequal or appear „cloudy“ in case of different weather and temperature conditions. This is no technical or functional defect in case of mineral resp. silicate systems, corresponds to the state of the art and must not give rise to any complaints for this reason.

**Density**

approx. 1,60 (standard white)

**Binder basis**

Balanced combination of potassium silicate and silica sol combined with organic stabilising agents (org. ratio < 5 %)

**Fire behaviour**

A2 - s1, d0 corresponding to DIN EN 13 501-1 (non-inflammable)

**Spreading rate**

150 - 200 ml/m<sup>2</sup>

Consumption values depend on the surface and have to be determined by a trial coating at the object.

P.T.O. !

<b>Properties</b>	<p>With einzA mineralit Sol-Fassadenfarbe the application field of mineral facade paints expands from unpainted, mineral surfaces to multitude surface conditions. Due to the binder combination with pre-silicified potassium silicate a renovation of old, sound coatings on an acrylate or silicone base presents a natural and environmentally friendly repainting.</p> <p>There will be no usual film formation but formation of a siliceous grid in collaboration of air humidity and carbon dioxide from the air. It remains permeable to air and highly water vapour permeable but still reaches a certain hardness. Capillary water absorption is extremely low.</p> <p>The reacted coating is low in stress and free of cracks even with thicker layers.</p> <p>The siliceous grid has a similar expansion behaviour like the mineral surface so that there will not be any tension due to heat or cold stress. einzA mineralit Sol-Fassadenfarbe is resistant to acid rain due to the use of a special filler combination (industrial resistant).</p>
<b>Surfaces</b>	<p>Suitable for all mineral surfaces like unpainted new or old exterior plaster surfaces of mortar group I, II and III, concrete and frost resistant sand-lime bricks as well as renovation coating on stable old coatings on lime, cement, silicone or silicate paints, organic based dispersion paints and synthetic resin plaster coatings.</p> <p>einzA mineralit Sol-Fassadenfarbe is not suitable for crack filling, thermoplastic and/or elastic coating systems due to the silicate structure.</p>
<b>Surface preparation</b>	<p>The surfaces have to be clean, stable and dry. Regulations of the current issue of the BFS-data-sheet no. 20 "Baustellenübliche Prüfungen zur Beurteilung des Untergrundes" have to be considered.</p> <p>For partial renovation of cracks and smaller unevenness einzA mineralit Sol-Fassadenfarbe can be filled with silicious sand (0,1 – 0,3 mm) until being ready to use. Afterwards, areas being smoothed have to be primed with einzA mineralit Grundiermittel and water, mixing ration 1:1.</p>
<b>Coating system</b>	<p><b>Unpainted, mineral normal up to low absorbent surfaces:</b></p> <p>Priming with einzA mineralit Grundiermittel and water (mixing ratio 1:1).</p> <p>A priming coat with einzA mineralit Sol-Fassadenfarbe diluted with max. 5 % of a mixing of einzA mineralit Grundiermittel and water (mixing ratio 1:1).</p> <p>A final coat with einzA mineralit Sol-Fassadenfarbe undiluted.</p> <p><b>Unpainted, mineral high absorbent surfaces:</b></p> <p>Priming with einzA mineralit Grundiermittel and water (mixing ratio 1:1).</p> <p>A priming coat with einzA mineralit Sol-Fassadenfarbe diluted with max. 10 % of a mixing of einzA mineralit Grundiermittel and water (mixing ratio 1:1).</p> <p>A final coat with einzA mineralit Sol-Fassadenfarbe undiluted.</p> <p><b>Unpainted new silicone, silicate or synthetic resin plaster coatings:</b></p> <p>A priming coat with einzA mineralit Sol-Fassadenfarbe diluted with max. 5 % of a mixing of einzA mineralit Grundiermittel and water (mixing ratio 1:1).</p> <p>A final coat with einzA mineralit Sol-Fassadenfarbe undiluted.</p> <p><b>Already painted surfaces with silicone, silicate or dispersion paints:</b></p> <p>Depending on type and condition (chalking) of the old coating application of einzA mineralit Grundiermittel in case of old coatings based on silicate or einzA Aquasol-Gel resp. einzA Hydrosol-Tiefgrund.</p> <p>A priming coat with einzA mineralit Sol-Fassadenfarbe diluted with max. 5 % of a mixing of einzA mineralit Grundiermittel and water (mixing ratio 1:1).</p> <p>A final coat with einzA mineralit Sol-Fassadenfarbe undiluted.</p>
<b>Precautions</b>	<p>Cover adjoining areas such as glass, clinker, natural stone. Splatters have to removed immediately in wet condition. Eyes and sensitive skin have to be protected against paint splatters, if necessary clean with plenty of water.</p>

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**Physical data** (standard / colour: white)

vapour diffusion resistance factor, wet-on-wet method (rel. humidity from 100 - 50 %):

$$\mu = 50$$

Layer thickness equivalent to diffusion air regarding to DIN 52 615 / DIN EN 7783-2:

$$sd = \leq 0,01 \text{ m}$$

Water vapour diffusion current density (V) regarding to DIN 7783-2:

V-value = > 150 g/(m<sup>2</sup>·d) corresponds to class V<sub>1</sub>, high

Water absorption coefficient (w) regarding to DIN EN ISO 1062-3: w = 0,060 kg/(m<sup>2</sup>·h<sup>0,5</sup>)

corresponds to class W<sub>3</sub>, low, ≤ 0,1 kg/(m<sup>2</sup>·h<sup>0,5</sup>)

$$W_{24} = 0,300 \text{ kg/(m}^2\cdot\text{h}^{24})$$

**Applying technique**

einZA mineralit Sol-Fassadenfarbe is ready to use.

Application by brushing, rolling or airless spraying.

Spraying with high-performance airless equipment:

Nozzle size: 0,021" up to 0,025" » Filter: 60 mesh » Spraying angle: 40 up to 80°

Pressure: Depending on sprayer and requirement.

**Processing guidelines**

During cold and damp seasons water dilutable components from the not yet dried coating could dissolve out relative shortly after application due to the interaction of high air humidity, mist or rain and temperature reductions (especially during cool and wet evening and morning hours). These are for example tensides, emulsifiers, protective colloids or other additives which are required in the coating to gain certain quality characteristics. If such stains occur, which mostly appear as sticky, glossy spots, the areas should not be reworked directly. The water dilutable stains will be washed off automatically by further humidity stress (for example after several heavy rainfalls). If a direct rework will be made the strains have to be washed off thoroughly with water before a further coating will be applied.

This phenomenon which only occurs in case of unfavorable weather conditions is state-of-the-art and unavoidable. It is a temporary visual defect which has no influence on the protective function of the coating.

**Processing instructions**

Basically repair work should always be carried out on the entire area and not only partially as in case of silicate and sol silicate paints surfaces may show more or less strong shade differences, depending on the object situation. This corresponds to the recognized rules of technology and cannot be avoided. Please find details in the BFS leaflet no. 25.

**Drying time**

Between priming and final coat a drying time of at least 12 hours has to be adhere.

**Processing temperature**

Air and object temperature not below +5 °C.

**Cleaning of tools**

Immediately after use with water.

**Storage**

Cool but frost-free in closed original plastic containers.

**Disposal**

For recycling only use containers being completely empty.

**Package sizes**

standard	12,5 l
einZA mix	2 l - 6 l - 12,5 l

**Notice**

Opened containers or diluted material has to be used at short notice!

Do not store opened containers for a long time as the material contains preservatives being environmentally sound.

P.T.O.!

### **Security advice and labelling**

The product is subject to the Ordinance on Hazardous Substance.

All necessary indications are contained in the Material Data Sheet regarding CLP Regulation (GHS) regarding Regulation (EC) 1272/2008. Available at [www.einzA.com](http://www.einzA.com) at any time or to be requested using [sdb@einzA.com](mailto:sdb@einzA.com).

Labellings on the packaging have to be considered.

### **VOC-content regarding enclosure II of the VOC guideline 2004/42/EG**

VOC limit value enclosure II A (sub-category c) - Wb: max. 40 g/l reg. level II (2010)

VOC-content of einzA (mix) mineralit Sol-Fassadenfarbe: < 30 g/l

The previous information has been conscientiously compiled according to the present state of knowledge of test technology and should serve as a guideline. Due to the multitude of uses and working methods, it is non-binding, does not establish any contractual legal relationship and does not release the consumer from his own responsibility of checking our products himself. Otherwise, our conditions of delivery and payment apply.

**Issued 01/2021;** with this, all previous specification sheets are invalid.