

# Minera Universal

Filling, highly water vapour-permeable, quartz-based texturing coating on a silicone resin-modified mineral basis.



## Product description

Field of application	<p>Texturing and crack-filling coatings with good filling capacity, for exterior and interior use. Suitable as a primer, intermediate or final coating. Filling facade coatings on plasters/renders, sound matt silicate, silicone resin and dispersion paints plus intact ETICS. Minera Universal is suitable as a surface protection for porous concrete wall panels and meets the requirements of the porous concrete manufacturers.</p> <p>Texturing, for the visual levelling of unevenly removed mineral plasters or structure levelling of spot repairs. Ideal for the slurry filling of fine cracks in the plaster, Particularly suitable as a covering intermediate coating on subsequent dispersion, silicone resin and dispersion silicate paints.</p> <p>Inside, Minera Universal can be used as a finely structured intermediate coating on creative silicate glaze techniques.</p>
Material properties	<ul style="list-style-type: none"> <li>■ Texturing</li> <li>■ High water vapour permeability</li> <li>■ Silification-capable for subsequent dispersion-silicate paints</li> <li>■ Slurry filling of hairline cracks</li> </ul>
Material base	Potassium water glass with organic additions according to DIN 18363, sect. 2.4.1.
Packaging/Package Size	<ul style="list-style-type: none"> <li>■ <b>Standard product:</b> 8 kg / 22 kg</li> </ul>
Colours	<p>White</p> <p>The preservative-free property continues to be guarantee if Histolith full colour paints are used (max. 10%). If the proportion added is higher, the required texture and volume are not achieved.</p> <p>With self-tinted material, to avoid colour differences, it is recommended that the required total quantity is mixed together.</p> <p>Minerva Universal can be tinted using the ColorExpress machine system according to all current collections in light shades to lightness value approx. 70 . To determine any tinting errors, please check accuracy of the colour mix before applying. Always use colours from one batch on continuous wall surfaces. When coating porous concrete, the lightness value (degree of reflection) should be greater than 30.</p> <p>Brilliant, intensive colours may show a lower opacity in some circumstances. It is therefore recommended that a similar, covering, white-based pastel shade is applied as an undercoat. A second finishing coat might be necessary.</p> <p><b>Colour resistance according to BFS Data Sheet No. 26: Class B group: 1</b></p>
Gloss level	Matt



Storage

Cool, but frost-free. Keep container well closed once open. Only store material in plastic containers.

Technical data

**Characteristics according to DIN EN 1062:**

- Maximum particle size: < 1500 µm S<sub>3</sub>
- Density: approx. 1.6 g/cm<sup>3</sup>
- Thick film when dry: 200–400 µm, E<sub>4</sub>
- Water permeability: (w value): ≤ 0.1 [kg/(m<sub>2</sub> · h<sup>0.5</sup>)] (low), W3. Tinting may cause deviations in the key technical data.
- Crack classes: **Crack bridging coating structure:** 2 x 400 g/m<sup>2</sup> Minera Universal, class: A1 (> 100 µm)
- Water vapour permeability (s<sub>d</sub> value): (s<sub>d</sub> value): < 0.14 m (0.03) m (high), V1. Deviations in the key technical data are possible because of the tinting.

Suitability according to Technical Information no. 606 Definition of Application Areas

Interior 1	Interior 2	Interior 3	Exterior 1	Exterior 2
+	+	+	+	+
(-) inapplicable / (o) of limited suitability / (+) suitable				

Suitable substrates

Substrates must be dry, clean and free from all substances that may prevent good adhesion. Follow VOB, Part C, DIN 18363, section 3. Please see Technical Information No. 650, "Substrates and their preparation" for suitability of the primer on different substrates and their special pre-treatment.

Substrate preparation

**Exterior surfaces:**

**Renders in MG Plc, PII and PIII/minimum compressive strength acc. to DIN EN 998-1 with min. 1N/mm<sub>2</sub>:**

New renders can be coated after an adequate drying period of at least 7 days at approx. 20 °C and 65% rel.humidity. In less favourable weather conditions (e.g. wind or rain), significantly longer waiting periods have to be maintained. With old firm renders, remove soiled surfaces manually or mechanically, taking legal requirements into account, e.g. using pressurised water jets or high-pressure water jets with added sand. Wet sand blasting is only possible with renders in mortar groups PII and PIII.

**Render with powdery layer:**

Remove chalky/floury surfaces, i.e. the "powdery layer", which reduces adhesion, by treating with Histolith Fluat and then washing.

**Render with sinter skin:**

Remove sinter skin, which can be recognised from its weakly shiny appearance, by treating with Histolith Fluat and then washing.

**Renders with sandy surfaces:**

Dry brush and clean the entire surface with pressurised water jets, taking legal requirements into account.

**Porous concrete wall slabs:**

Brush down porous concrete surfaces thoroughly. Remove soiling. Repair damaged areas and irregularities > 5 mm depth with Disbofein 331 repair mortar, repair cavities, irregularities and unevenness caused in production up to 5 mm depth with Disbofein 332 filler.

**Render repairs:**

When repairing opened cracks and damaged areas of render, care should be taken to ensure that the repair mortar is suitable for the strength and texture of the existing render. Trass-lime/trass-cement based ready-mixed mortar are particularly suitable for render repairs. The repairs must be completely set and dry before coating and should basically be treated with Histolith Fluat and then washed. Make sure that the fluosilicate treatment always covers 1-2 brush widths beyond the area to be repaired. With major render repairs, always treat the entire area (old and new render).

**Old mineral coatings:**

Remove adherent old coatings by wet or dry cleaning. Remove non-adherent, weathered mineral coatings by sanding, scraping or etching off and rinse the entire surface with water. Then apply a primer coat with Syllitol® RapidGrund 111.

**Old dispersion paint coatings, not sound:**

Completely remove mechanically or by stripping and clean afterwards using high-pressure hot water jets, taking legal requirements into account. Apply a primer coat with Minera Universal to stripped, non-absorbent substrate. Apply a primer coat with Syllitol® RapidGrund 111 to striped, highly absorbent substrate.

## **Old matt dispersion paint coatings, sound:**

Remove soiling and slight chalking using pressurised water jets or other suitable method, taking legal requirements into account. Intermediate or final coating with Minera Universal.

## **Sand-line fair-faced masonry:**

Only frost-resistant facing bricks that do not contain driving or discolouring inclusions such as sand and loam clumps are suitable for coating. Jointing must be without cracks and may not contain any sealants etc. which could reduce adhesion. Dry brush salt efflorescence. If surfaces are chalky or floury, paint the entire surface with Histolith Fluat and then wash. Roof, window and floor joint must be made in accordance with the guidelines of the Sand-Lime Brick Association.

## **Stone handling:**

Natural stones must be firm, dry and free from efflorescence. Stones weathered on the surface should be consolidated before coating by treating several times with Histolith Steinfestiger. Clean dirty stones using pressurised water jets, taking legal requirements into account. Repair stones using stone substitute materials, not plaster mortar. The repair areas must be properly set and treated expertly before coating.

## **Rising damp:**

Rising damp can destroy coatings prematurely. This can only be prevented in the long term by the use of horizontal insulation. The use of the Histolith Trass-Sanierputz system is a good, long-lasting solution. With older building structures, the creation of dry or evaporation zones by inserting a layer of filter gravel between the plinth and the earth can be advantageous.

## **Areas with salt efflorescence:**

If surfaces with salt efflorescence are coated, no liability can be accepted for the long-term durability of the coating or the prevention of salt efflorescence.

## **Interior surfaces**

### **Mineral substrates with sinter skin, floury or dusty surface:**

Mechanically clean or treat thoroughly and then wash with water.

### **New renders in mortar groups PI, PII and PIII/min. compressive strength acc. to DIN EN**

#### **998-1 with min. 1N/mm<sup>2</sup>:**

Firm, normally absorbent renders/plasters can be coated without pre-treatment. Treat spot repairs after drying with Histolith Fluat and then wash with water.

#### **Renders/Plasters in mortar groups PIV/minimum compressive strength acc. to DIN EN 13279 S 2 with min. 2 N/mm<sup>2</sup>:**

On firm renders: Primer coating with Caparol-HaftGrund EG. Consolidate soft gypsum plasters with Caparol-Dupa Putzfestiger. Gypsum plasters with sinter skin must be sanded, dust must be removed and Caparol-Dupa Putzfestiger primer applied. After drying well, apply Caparol-HaftGrund EG intermediate coating in each case.

### **Gypsum plasterboards (sandwich-type plasterboards/drywalls):**

Sand/grind off burrs. Primer coating with Caparol-HaftGrund EG. Consolidate soft gypsum filled areas previously with Caparol-Dupa Putzfestiger. In the case of boards with water-soluble, discolouring ingredients, apply Caparol AquaSperrgrund primer coating beforehand and Caparol-HaftGrund EG intermediate coating. (Follow BFS Data Sheet No. 12.)

### **Gypsum wallboards:**

Primer coating with Caparol-HaftGrund EG.

### **Concrete:**

Remove any separating agent residues. Primer coating with Caparol-HaftGrund EG.

### **Sand-line fair-faced masonry:**

Dry-brush off salt efflorescence.

### **Fair-faced brick masonry:**

Primer coating with Caparol-HaftGrund EG.

### **Sound matt dispersion paints and synthetic resin render coatings:**

Primer coating with Caparol-HaftGrund EG.

### **Unsound existing coatings:**

Remove unsound coatings of enamel and dispersion/emulsion paint or synthetic resin bound coatings. Primer coating with Caparol-HaftGrund EG. Mechanically remove unsound mineral paint coatings. Apply a primer coat with Syllitol® RapidGrund 111.

### **Glue-bound distemper (limewater colour):**

Wash thoroughly. Apply Caparol-Dupa Putzfestiger as primer coating and Caparol-HaftGrund EG intermediate coating.

Method of application	<p><b>Mildewed surfaces:</b> Remove mildew layer by wet cleaning. Wash surfaces with Capatox and allow to dry thoroughly. Apply FungiGrund primer depending on absorbency of substrate. Apply our Indeko-W, Malerit-W or Fungitex-W products to badly infested surfaces. Comply with the legal and official regulations (e.g. Ordinance on biological agents and hazardous substances).</p> <p><b>Areas with salt efflorescence:</b> If surfaces with salt efflorescence are coated, no liability can be accepted for the long-term durability of the coating or the prevention of salt efflorescence.</p> <p>On smooth substrates, we recommend applying Minera Universal with a brush; apply to textured substrates apply with a roller. Spray application with a powerful render spray system and with a trowel and smoothing trowel is also possible.</p> <p>With porous concrete wall slabs Apply primer with a roller. Apply covering coating slab by slab with a roller and immediately after application roller evenly and without joins in one direction using a textured foam roller (e.g. Motopren-coarse).</p>
Dilution	<p><b>Spray application:</b> With Inotec InoBeam M8 peristaltic conveyor pump. Material dilution: to max. 10% with a mixture of 1 part Sylitol RapidGrund 111 and 1 part water. Nozzle size: 4 mm Spray pressure: 3 -4 bar</p> <p>Dilutable to max. 10% with a mixture of water and Sylitol RapidGrund 111 in a ratio of 1:1.</p>
Coating structure	<p>Apply Minera Universal, diluted, not as slurry, as primer coating to maximal 10%, as intermediate and final coating to max. 5% with a mixture of 1 vol. part Sylitol® RapidGrund 111 and 1 vol. part water. On highly and unevenly absorbent substrates, apply a primer coating as a mixture of 1 vol. part Sylitol® RapidGrund 111 and 2 vol. parts water with a brush instead of rubbing in.</p>
Consumption	<p>If used as a first coating on porous concrete, a bucket (22 kg) of Minera Universal is diluted with primer, as a primer with approx. 1.6–2.0 l (8–10 % by weight) and as final coating with approx. 0.4–0.6 l (2– 3 % by weight) in the ratio of 1 vol. part Sylitol® RapidGrund 111 and 1 vol. part water.</p> <p>400–500 g/m<sup>2</sup> per coating. Consumption may be higher, depending on the absorbency and structure of the substrate. For the initial coating of porous concrete wall slabs, consumption should be 900-1000 g/m<sup>2</sup> for both the primer and the covering coating. These consumption figures are guideline values. The exact amount of material must be determined by test coating on the building itself.</p>
Application conditions	<p>Temperature of product, ambient air and substrate: Min. + 8° C to max. + 30°C. Do not apply in direct sunlight, rain, extremely high humidity (wet fog) or strong wind, on heated substrates, etc.. Use protective tarpaulin if necessary. Take care if there is a danger of night frosts.</p>
Drying/drying time	<p>At +20 °C and 65% rel. humidity, allow to dry for at least 12 hours between individual coatings. With initial coating on porous concrete, allow to dry for at least 24 hours. Drying may take longer in cool and damp weather.</p>
Tool cleaning	<p>Immediately after use with water, adding detergent if necessary. Keep tools in the paint or in water during breaks in work.</p>

Note	<p>To avoid joins when applying to larger surfaces, use sufficient numbers of workers and apply wet-on-wet in one go. Not suitable for horizontal surfaces impacted by water. A typical solvent odour may occur if Caparol-Tiefgrund TB is used indoors. Interiors must therefore be well ventilated. In sensitive areas, apply non-aromatic, low-odour Dupa-Putzfestiger. Cloudiness may occur on coloured mineral surfaces. If this is not wanted, treat the surface with Syllitol<sup>®</sup> Finish 130 in the required colour. Marks from repairs in the surface depend on many different factors and are therefore inevitable (BFS information sheet 25). Coloured marks may occur on filler materials containing gypsum. A complete intermediate coating with Caparol-Haftgrund EG reduces this risk.</p> <p><b>Compatibility with other coatings:</b> In order to retain its special properties, Minera Universal must not be mixed with other coating substances.</p> <p><b>Covering:</b> Carefully cover the areas surrounding the surface to be coated, especially glass, ceramics, glazes, clinker, natural stones, metal and natural or glazed wood. Rinse off paint splashes immediately with water.</p> <p><b>Structural measures:</b> Projecting building parts, such as cornices, window sills, wall capping etc. must be expertly covered in order to prevent dirt streaks or severe moisture penetration.</p>
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## information

<p>Hazard information/ Safety advice (Status as at date of publication)</p>	<p>If medical advice is needed, have packaging or identification label at hand. Keep out of the reach of children. During spray application, use a face mask with P2 particle filter against spray mist.</p>
Disposal	<p>Hand over liquid material to collection point for old paint/varnishes, and dispose of dried/hardened product residues as construction and demolition waste or municipal/domestic waste.</p>
EU limit value for the VOC content	<p>of this product (Cat. A/a): 30 g/l (2010). This product contains max. &lt; 1 g/l VOC.</p>
Product code paints and enamels	<p>BSW10</p>
Substances of content –	<p>Alkali water glass, polyacrylate resin, polysiloxanes, Silicates, calcium carbonate, titanium additives.</p>
Technical Assistance	<p>It is impossible to list the wide variety of substrates and their specific problems in this information leaflet. If substrates are to be coated that are not listed in this Technical Information, please contact us or our technical sales staff. We will happily provide you with detailed, specific advice.</p>
Customer Service Centre	<p>Tel.: +49 6154 71-71710 Fax: +49 6154 71-71711 e-mail: kundenservicecenter@caparol.de</p>

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This Technical Information is based on the latest technical developments and on our experience. Due to the wide variety of substrates and project conditions, however, these instructions do not release the purchaser/user from his obligation to determine the suitability of our materials with regard to technical and application requirements, on his own responsibility, for the proposed purpose under the project characteristics.

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