

## Document type

## Technical Data Sheet

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| <b>Name</b>                     | <b>LIME&amp;CLAY</b>  |
| <b>Description</b>              | Natural, lime and clay-based material for decorative finishes on interior and exterior wall surfaces. Naturally anti-mould and breathable. The final finish has a textured and rustic look. It is highly appreciated for the benefits it brings to indoor air quality.  |
| <b>Composition</b>              | Hydrated lime, baked clay and selected marble powders.  |
| <b>Grain size</b>               | 1 mm  |
| <b>Available Versions</b>       | Pale Beige, Pale Red  |
| <b>Appearance</b>               | Powder  |
| <b>Colour</b>                   | Beige or Red according to the versions, it can be tinted with lime-compatible colourants  |
| <b>Packaging</b>                | 16 kg net polyethylene containers   |
| <b>Application</b>              | By hand, with a steel trowel  |
| <b>Type of Surface</b>          | Interior and exterior walls<br><u>New Wall Surface</u><br>Plaster: no priming necessary<br>Gypsum / Plasterboard / Medium Density: one coat of QUARTZ PRIMER<br><u>Old Wall Surface</u><br>Plaster: one coat of QUARTZ PRIMER<br>Fast drying / Limewash: brush down and apply one coat of QUARTZ PRIMER<br>Polished Lime: Abrade, brush down and apply one coat of QUARTZ PRIMER<br>Washable Paint: one coat of QUARTZ PRIMER |
| <b>Dilution</b>                 | Mix dry product with roughly 48% of its weight in water   |
| <b>Consumption</b>              | 2.2 - 2.6 kg/m <sup>2</sup> after two coats   |
| <b>Drying</b>                   | 6 hours at 20°C / 68°F to the touch<br>48 hours at 20°C / 68°F below the surface<br>180 days stable   |
| <b>Application temperatures</b> | min 5 max 30°C – R.U. < 85% ca  |
| <b>Coat Thickness</b>           | 1.3 – 1.6 mm for a total of two coats   |
| <b>VOC Classification</b>       | EU Directive 2004/42/CE: EU limit value for this product (cat A/I – water-based decorative effect coating): 200 g/l (2010). This product contains less than 1 g/l of VOC.   |
| <b>Specific Weight</b>          | 1.4 ± 0.2 (kg/l)  |
| <b>pH after 30 days</b>         | 12.5 ± 0.50   |
| <b>Vapour Permeability</b>      | SD ~ 0,04 m (DIN 52 615)  |
| <b>Flammability</b>             | European Class of Reaction to Fire A1: non-combustible, no contribution to fire   |
| <b>Mould Resistance</b>         | ASTM D 3274 – “Standard Test Method to evaluate the degree of surface disfigurement of paint by microbial, fungal and algae growth.<br>Result: Front Panel 10/10/10 Back Panel 10/10/10 = no growth   |

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| <b>Scrub Test Resistance</b>    | ASTM D 2486-06 method A = was used: scrubbing fine sand + metallic brush for 10,000 cycles   |
| <b>Impact Test</b>              | UNI EN ISO 6272-2-2006. 1 kg doming punch was dropped from different heights and only at the height of 8 cm., it left a 5.5 mm. dent in the surface and a tiny crack appeared around its circumference.  |
| <b>Pencil Hardness</b>          | ASTM D3363- Pencil hardness 5H   |
| <b>Shore Hardness</b>           | Norm ASTM 2240 average   |
| <b>Adhesion</b>                 | Norm UNI EN 13892-8 2004 average value = 2,0   |
| <b>Pot life</b>                 | 4 hours on average   |
| <b>Shelf life</b>               | 24 months when stored according to the recommended guidelines  |
| <b>Pot life</b>                 | 90 minutes   |
| <b>Storage</b>                  | In original sealed packaging between 5° - 35°C in a dry, dark environment  |
| <b>Safety Norms</b>             | Irritating. / Risk of serious damage to eyes. / Irritating to the skin. / Keep out of children. / Avoid contact with eyes. / In case of contact with eyes, clean immediately with water without rubbing them, and consult a doctor. / Wear suitable gloves and eyes / face protection. / In case of ingestion of the products, consult immediately a doctor showing him the can or the label of the product. Danger labelling under directives 67/548/EEC and 1999/45/EC and following amendments and adjustments. The product must be transported, used and stored according to current standards of hygiene and safety.  |
| <b>Disposal</b>                 | Product must be disposed of according to norms and regulations in force. Containers must be sent for recycling. Follow directions on the packaging   |
| <b>Application Instructions</b> | <p><b>WARNINGS</b></p> <p>We recommend using materials from the same production batch for the same project. If you must use different batches, we suggest mixing their material together to avoid any slight variations in shading.</p> <p>To ensure proper usage, dilution, and application of the products mentioned in these pages, please consult the corresponding technical data sheets.</p> <p>When preparing the surface and applying the materials, we advise using appropriate tools and personal protective equipment (PPE).</p> <p>During application and for the following 72 hours, protect the surfaces from sudden temperature change, direct sun light and water. Don't apply in temperatures below 8°C or above 35°. During application make sure that the work area isn't too damp to avoid problems with application times.</p> <p>Remember to have a strong light parallel to the wall and situated on only one of the two sides of the wall you are working on (usually on the same side as other sources of light such as windows). In this way the shadow of the trowel allows you to see the actual state of the finish. Every so often, during the second and third coat, the light should be moved so that the wall doesn't dry out too much in one spot from the heat of the lamp.</p> <p><b>APPLICATION</b></p> |

Protection of the work area: Masking tape and protective material over the baseboards and around windows and doors.

LIMECLAY has to be applied by pouring the powder into clean water and mixing accurately. The material has to be diluted in order to obtain a thick paste, easy to apply, see dilution proportions above.

**FIRST COAT:** Apply the wet product with a metal trowel being careful to apply evenly over the entire surface. Let it dry at least 70% or completely before applying the second coat. It is suggested that you make the first coat even and even and without any ridges.

**SECOND COAT:** Begin applying the first coat after the first coat is at least 70% or completely dry, being careful to proceed seamlessly from one work area to another. A few minutes after applying the second coat, wipe over the entire surface with a dry SPONGE FLOAT RED to make the surface uniform. It may be best to perform this step twice: once immediately after application of the LIMECLAY, and then again after a few minutes. The dry sponge float can be scraped clean with a metal trowel from time to time. To obtain a chiaroscuro effect of light and dark shades, you can use a wet sponge float. Some areas will be wetter than others. The wetter areas will appear lighter in tone because the water will have deposited lime on the surface.

**EXTERIORS:** For exterior applications there are some rules to respect and some precautions to take. We remind you that carbonation, i.e. the process that takes place through the absorption of atmospheric CO<sub>2</sub>, is completed in a few hours on the surface but takes several days to take place in depth. It is therefore important that the application takes place in the certainty of the absence of heavy rains in the three following days. It is also not recommended to apply it on walls that do not have at least a small roof overhang. Penetrating rain could ruin the finish even after weeks as deep carbonation is completed after more than a month. Avoid windy days, especially at high temperatures, as well as the risk of frost in the 48 hours following application. In external applications in hot climate conditions, it is also recommended to protect the wall from the sun with shade cloths applied to the scaffolding. Lime-based products must dry slowly to better fulfil their characteristics.

#### Finish Protection

**Interiors:** A protective treatment is optional in most circumstances. It is however necessary in bathroom, kitchen and splashback walls.

**Exteriors:** This finish, as all lime-based plasters, absorbs water during rainy weather, which results in a temporary "wet effect" on the surface. However, this plaster releases the absorbed water within a few hours, allowing the surface to dry without any damage nor alteration to the finish. While a final treatment is therefore optional, it is highly recommended in areas with high pollution levels or if you wish to avoid the temporary wet effect that can occur after rainfall.

To protect the finish, after at least 72 hours at a minimum of 20°C, proceed with a colourless, penetrating HYDROCALCE, developed to protect exterior plaster coverings.

#### Maintenance

Little maintenance is needed, brushing off dust occasionally

**Tools**

SI TROWEL, CORNER TROWEL, SCRAPERS, SPONGE FLOAT COARSE

Clean with water immediately after use

**Decorative Complements  
(optional)**TERRACOTTA / SALT & PEPPER / MOTHER OF PEARL / MILLED MARBLE / MICA /  
GLITTER / EBANO POWDER

We have drawn up the material presented above to the best of our technical and experiential knowledge. Nevertheless, our suggestions and recommendations are not guaranteed. All responsibility for the obtained results lies solely with the method and conditions adopted for the application of the product. Such indications constitute valid support for verifying the product's suitability for the specific case. We reserve the right to make modifications to the present information without previous warning.