

Lime Casein Paint

High water vapour permeability interior coating made from marble lime and casein for matt coatings on lime and clay or loam

Open-pored, low tension interior coating, free from synthetic resin, on lime-compatible substrates, such as firm lime plaster and clay or loam. Preferred use in clay or loam and half-timbered buildings. Compared to unmodified lime wash paints this product is characterised by wipe resistance, good hiding and pigmentation as well as a broad range of uses. High yielding powdered concentrate, to be mixed with water.

1. Product Properties

AGLAIA Lime Casein Paint combines typical lime properties such as diffusivity, lusted lime effect and natural mould resistant effect with the application advantages of organically modified coating systems. Particularly durable and authentic on lime plasters due to the formation of water-insoluble lime caseinate. As a solvent and emissions-free powdered concentrate is characterised by excellent eco-balance, human-tolerability and environmental compatibility.

1.1. Composition

- Readily carbonating calcium dihydroxide (slaked lime)
- Casein as organic binder component
- Highly extended with natural chalks and kaolins
- Solvent, emissions and VOC-free
- "Transparent recipe": see AGLAIA full declaration

1.2. Technical properties

1.2.1. Overview

- Use on interior surfaces
- VOC-free powdered paint
- Extremely capillary-active and non-vapour retarding
- High yielding powdered concentrate, to be mixed with water
- Free from electrostatic charge
- Maximum carbon dioxide permeability
- For lime, clay or loam and mineral substrates
- Natural alkalinity helps to prevent bacteria and mould

1.2.2. Important building physics characteristics*

Parameter	Value	Conformity
Density 20°C:	1.35 kg/L	
pH value 20°C:	11	
Dynamic viscosity 20°C:	approx. 1,000 mPas	
W ₂₄ value:	0.80 kg/(m ² h ^{1/2})	
s _d value (H ₂ O):	< 0.02 m	
Grain size:	fine	EN 13300
Gloss level at 85°C:	dull matt	EN ISO 2813
Flammability class:	A2 Non-flammable	EN 13501-1, DIN 4102
VOC content (max.):	0g/L	ChemVOCFarbV (Regulations limiting VOC emissions of paints and lacquers), Cat. A/a

* Values partly in pasty state

1.2.3. Colour

- Lime White.
- Can be tinted in pastel colours with BEECK Full Colour Lime Concentrate (max. 20%) or with lime-compatible AGLAIA pigments.
- Due to the system and substrate, especially where tinted coatings are applied, a mottled appearance is possible; therefore, always try out on a test area of original substrates on site.

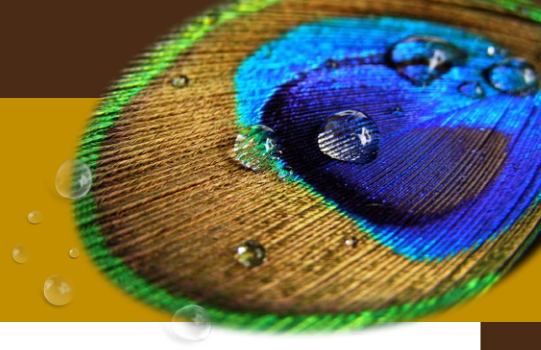
2. Use

2.1. Substrate requirements

- Use only on porous, absorbent and water-wettable, lime-compatible substrates.
- The substrate must be clean, dry, firm and stable and must be free from efflorescent and separating substances.

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- Check drying and strength of new plaster.
- Carefully make good chipped surfaces, cracks and misses with the same type of material and texture.
- Before coating, prewetten absorbent substrates and allow to dry on until matt-damp.
- Ensure uniform substrates and careful application on high visual quality surfaces and in glancing light.

2.2. Brief information on the standard system

- Mix AGLAIA Lime Casein Paint 1:1 with water and add additional water to make optimally coatable for the substrate it is to be used.
- Two to three coats of AGLAIA Lime Casein Paint as required. To be determined by trying out on a test area.
- High humidity stimulates carbonation and, just like a lime-compatible substrate, it is also helpful for a durable, wipe-resistant coating result.

2.3. Substrate and preparatory treatment

- **(Air)lime plaster (PI,CSI-II), lime-cement plaster (PII), cement plaster (PIII), renovation plaster:**
Sand off sinter skin on new plaster. Optimum bonding with fresh, however, dry lime plaster. Prewetten absorbent plaster and allow to dry on until matt-damp. 2 – 3 coats of AGLAIA Lime Casein Paint.
- **Concrete, fibrated cement, calcium silicate, brick:**
Clean concrete thoroughly with water and formwork release oil remover and rinse off with clean water. Test the wettability of the cleaned substrate by spraying on water. Prime highly absorbent areas with AGLAIA Wall Primer, thinned with 2 parts water. Clean masonry, make good defective joints, bricks and misses. For smooth and even wall design cover the whole surface with mineral filler. Lightly grind clinker or smooth substrates.
- **Clay or loam:**
Clay or loam must be through-dry, firm and stable. Repair cracks with plaster beforehand, brush off any sanding grain. Prewetten and allow to dry until matt damp. Apply several extremely thin layered, thinned coats, with 12 hours drying time between each. Always try out on a test area on site first!
- **Gypsum plaster, gypsum-lime plaster, stucco:**
Always test for bleeding through constituents and compatibility with alkaline lime casein paints. Trying out on a test area on site is indispensable. Apply priming coat with AGLAIA Wall Primer, thinned with 2 parts water. Sand off any sinter skin on gypsum plaster.
- **Nonwoven wall covering, fabric, textured/embossed wallpapers, woodchip wallpaper:**
Check for full, homogeneous and overlapping-free bonding of the whole surface, including in the area of joints. Suitable only for water-wettable, alkali-resistant and overcoatable nonwoven wall covering and wallpapers.
- **Old mineral coatings:**
Check substrate carefully for firmness and adhesion. Brush off old, matt and absorbent mineral coatings thoroughly. Lacquer, emulsion and latex coatings are unsuitable. Completely remove lime wash paints. In historical properties, note and follow listed building conservation specifications.
- **Unsuitable substrates** are alkali-sensitive and efflorescent substrates, plastics, wood-based materials and wood cement as well as gypsum board and gypsum fibre boards. Other unsuitable substrates are film-forming coatings such as oil, latex and synthetic resin coatings.
- **Defective substrates** require a differentiated approach. Care is needed when working on efflorescent and saponifiable substrates. Use renovation plaster and BEECK Mineral Paints for damp basement and old building walls.

2.4. Application instructions

2.4.1. General information

Check substrate suitability as required (see 2.1 and 2.3). Pay particular attention to the absorbency, strength and texture of the respective substrate. Try out on a test area before using on high quality and critical surfaces.

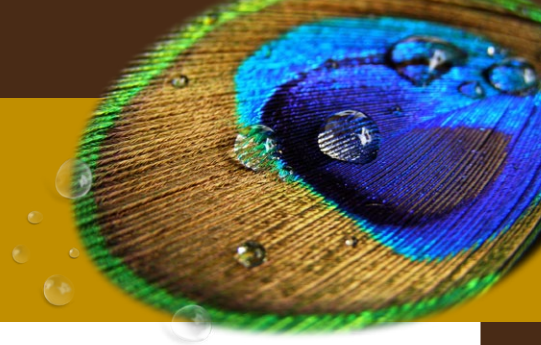
- Carefully cover surfaces which are not to be treated – especially floors, windows, furniture and expansion joints – and protect them from splashes.
- Provide personal protective equipment! Protect the skin and eyes. Wear safety glasses or goggles / face protection. Refer to safety instructions!
- Mix AGLAIA Lime Casein Paint 1:1 with water according to the factory specifications and stir thoroughly with powered mixing paddle, screen if required.
- Do not apply on heated or chilled through areas.
- Prewetten absorbent substrates such as clay or loam and allow to dry on until matt-damp.
- Minimum application temperature: +8°C.
- High humidity stimulates carbonation.
- Drying time: at least 12 hours per coat, only paint over wipe-resistant coatings.
- Ensure sufficient ventilation (purge ventilation) and heat (room temperature) for several days for drying.

2.4.2. Application

Apply using BEECK Mineral Paint Brushes or Oval Brushes. Apply according to recognised rules of good lime techniques with extremely thin coat, uniformly and seamlessly by cross coating.

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• Preparation, mixing the AGLAIA Lime Casein Paint:

- Stirring continuously, add 1 kg powdered paint to 1 L water.
- Use mixer (drill with powered mixing paddle) to stir for 5 minutes, until the batch is lump free and uniformly thick.
- Then allow it to swell for half an hour and before use, add a further 0.2 L–0.5 L of water to make it ready for coating. Apply sample coating, the coating must never be “siphoned off” when applied to absorbent substrates (mixing water is drawn out of the coating and into the substrate).
- Screen to remove any lumps and dried up paint; foamy bubbles disintegrate on painting.

2.5. Auxiliary products

- AGLAIA Wall Primer: Primer on absorbent gypsum plaster.
- AGLAIA Pigments: for pastel coloured tinting. Soak pigments in a little water or alcohol for several hours and then use a powered mixing paddle to stir it into the lime casein paint that has been made up as a paste. Screen out any lumps. Use only lime-compatible pigments!

3. Application Rate and Container Sizes

The application rate, i.e. the quantity required for smooth, normally absorbent substrates is approx. 0.12 L pasty product m² and coat, which corresponds to approx. 50 g AGLAIA Lime Casein Paint. Try on a test area on site to determine substrate-related application rate differences and the number of coats required.

Container sizes: 1 kg / 5 kg / 10 kg

4. Cleaning

Thoroughly clean equipment, tools and soiled clothing with water immediately after use.

5. Storage

Stored cool and frost-free in powder form can be kept for at least 24 months. Once mixed with water, use up within 3 days.

6. Safety Instructions

- Comply with the Safety Data Sheet. **Xi - Irritant! Irritating to eyes.** Avoid contact with skin and eyes. Wear suitable protective clothing, gloves and eye / face protection. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Do not breathe dust. Carefully cover the area surrounding the surfaces to be coated, wash off splashes immediately with water. Repeated contact may cause allergic reactions in people who are particularly sensitive. For details of product composition refer to AGLAIA full declaration. Keep out of the reach of children. Dispose of in accordance with the legal regulations.
- Waste code (EWC code): 080201

7. Declaration

This technical information is offered as advice based on our knowledge and practical experience. All information and tips are provided without guarantee and do not establish rights to make any claims of any kind whatsoever. The information provided does not release the user from their responsibility to check the product's suitability and application method for the specific substrate on which it is to be used. Subject to change without notice as part of our product development. Additives for tinting, thinning, etc. are not permitted. Check the colours before use. This information sheet becomes invalid automatically when a new edition is issued. The information in the current version of the Safety Data Sheets is binding for classification according to the Hazardous Substances Regulations, disposal, etc.

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