

AGLAIA Structural Casein Paint

Fine grained casein coating for lime, gypsum and loam as well as for the AGLAIA Wall Glazing Technique

1. Product Properties

Can be used universally on firm walls and ceilings in domestic and public use areas, in schools and kindergartens. Due to its grainy texture it creates a lively, attractive scattered light effect. Ideal for nonwoven wall coverings, gypsum plaster, gypsum board, clay or loam. AGLAIA Structural Casein Paint in combination with the AGLAIA Wall Glazing Technique has for more than 4 decades been tried and tested in practice on millions of square metres of building surfaces. As a casein emulsion paint for universal use it combines outstanding functional and working properties with an absolutely positive building biology profile. It is therefore ideally suited for healthy wall materials such as (air)-lime plasters and clay or loam and is just as suitable for use in new build as in renovation projects.

1.1. Composition

- Casein, emulsified vegetable oils and resins
- Mineral pigments: lightfast and of natural origin
- Texture grain approx. 0.4 mm
- Free from plasticisers and synthetic resins
- Solvent-free, low emissions and low VOC
- "Transparent recipe": see AGLAIA full declaration

1.2. Technical properties

1.2.1. Overview

- Use on interior surfaces
- Attractive grain texture (0.4 mm)
- Lime matt, subtle surface finish
- Opaque and high yield
- Chalking-free, low tension clay or loam coatings
- Low yellowing effect
- Extremely water vapour permeable
- Can be colour-glazed
- Ready-to-use

1.2.2. Important building physics characteristics*

Parameter	Value	Conformity
Density 20°C:	1.57 kg / L	
pH value 20°C:	9	
Dynamic viscosity 20°C:	8,000 mPas	
s _d value (H ₂ O):	0.05 m	
Hiding power / Contrast ratio:	Class 2	EN 13300
Wet-scrub resistance:	Class 3	EN 13300
Grain size:	Coarse (0.4 mm)	EN 13300
Gloss level at 85°:	Dull matt	EN ISO 2813
Flammability class:	A2 Non-flammable	EN 13501-1, DIN 4102
VOC content (max.):	3 g / L	Directive 2004/42/EC (limitation of VOC emissions of paints and lacquers), Cat. A / a

**) applies for white, hue-dependent variances possible*

1.2.3. Colour

- White and ready-mixed in pastel colours.

2. Use

2.1. Substrate requirements

- The substrate must be clean, dry, firm and stable and must be free from efflorescent and separating substances.
- Check drying and strength of new plaster.
- Carefully make good chipped surfaces and misses with the same type of material and the same texture.
- Use plaster to repair cracked substrates. Areas with individual hairline cracks and minor structural defects can be coated all over with AGLAIA Structural Casein Paint; try out on a test area. Alternatively, cover with fabric or nonwoven wall covering.
- Ensure uniform substrates and careful application on high visual quality surfaces and in glancing light, especially if using wall glazing techniques.

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2.2. Brief information on the standard system

- Apply two coats of AGLAIA Structural Casein Paint.
- Add water to AGLAIA Casein Paint to make it optimally coatable depending on substrate and application.
- Prime absorbent surfaces with AGLAIA Wall Primer or AGLAIA Emulsion Primer beforehand.

2.3. Substrate and preparatory treatment

• **Gypsum plaster, plaster stucco, lime plaster (PI/CSII), lime-cement plaster (PII), cement plaster (PIII):**

Check drying and strength of plaster. Check new plaster for sinter skin; remove any sinter skin found by sanding. Prime absorbent plaster with AGLAIA Emulsion Primer or AGLAIA Wall Primer, thinned with 2 parts water. Consolidate superficially sanding, but firm plaster with AGLAIA Emulsion Primer. High alkaline, new lime and cement plaster are less suitable for casein emulsion paints (saponification, odour emissions). Recommendation: BEECK mineral paints.

• **Gypsum boards:**

Ensure proper installation and required surface quality and evenness tolerances under the given on site and glancing light conditions (VOB/C and quality level 3 or 4, according to good practice guide No. 2 issued by the German gypsum industry association). Prime gypsum board with AGLAIA Emulsion Primer or AGLAIA Wall Primer, thinned with 2 parts water. An exception is water-repellent impregnated wet room boards; these are not to be primed. Recommendation for AGLAIA Wall Glazing Technique: full surface fabric or nonwoven wall covering on lightweight building boards.

• **Clay or loam:**

Clay or loam must be through-dry, firm and stable. Repair cracks with plaster beforehand, brush off any sanding grain. Apply priming coat with AGLAIA Wall Primer, thinned with 2 parts water, or AGLAIA Emulsion Primer. Then apply 2 – 3 thin coats of thinned AGLAIA Structural Casein Paint. Always try out on a test area first before using on clay or loam!

• **Wood-based materials (OSB, particleboards, MDF):**

Prime with AGLAIA Wood Primer. Always try out on a test area on site (discoloration, stains). Full surface fabric or nonwoven wall covering is additional recommended. Not suitable for surfaces exposed to splashing or spray water, e.g. in sanitary units.

• **Calcium silicate masonry, brick:**

Clean the surface thoroughly and check for absorbency, moisture damage and efflorescence (e.g. salt edges). Make good crumbly bricks and joints. Coat highly absorbent substrates with AGLAIA Emulsion Primer.

• **Concrete:**

Thoroughly clean with water and formwork oil remover, and rinse off with clear water. Test the wettability of the cleaned substrate by spraying on water. Prime with AGLAIA Emulsion Primer or AGLAIA Wall Primer, thinned with 2 parts water. Apply two coats of AGLAIA Structural Casein Paint. For a uniform wall design, free from voids or shrink holes, coat the whole surface with cement filler or nonwoven wall covering.

• **Nonwoven wall covering, fabric:**

Check for full, homogeneous and overlapping-free bonding of the whole surface, including in the area of joints, especially if using for the AGLAIA Wall Glazing Technique.

• **Old coatings:**

Clean thoroughly matt, absorbent and fully adhering synthetic resin or natural resin-based emulsion coatings. Overcoat directly with AGLAIA Structural Casein Paint, we recommend that you try out on a test area on site. Remove lacquer, oil and latex coatings. Brush off chalking coatings. Clean and degrease old wall glazings with soap water and a sponge. Renovate existing highly alkaline lime wash and silicate system coatings with BEECK Mineral Paints, no suitable substrate.

• **Unsuitable substrates** are less stable, efflorescent and non-porous substrates, e.g. plastics, lacquers and metals.

• **Defective substrates** require a differentiated approach. Try out on a test area of critical substrates such as unknown old coatings, loam and clay. Rooms with continuously high humidity and/or mould problems are unsuitable for casein emulsion paints. 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 surfaces.

- Carefully cover surfaces which are not to be treated – especially floors, windows, furniture and expansion joints – and protect them from splashes.
- Only use containers from the same production batch to coat self-contained areas.
- Before use, stir AGLAIA Structural Casein Paint thoroughly with a powered mixing paddle before use.
- Add water to make optimally coatable.
- Do not apply on heated or chilled areas. Minimum application temperature: +16°C
- Drying time: at least 12 hours per coat. It is always recommended to allow casein paint to dry for several days before starting glazing with AGLAIA Beeswax Glaze Binder.
- Ensure sufficient ventilation (purge ventilation) and heat (room ambient temperature) for several days for drying.

2.4.2. Application

With roller or brush. Apply on self-contained areas with a thin coating, no overlapping and uniformly in one continuous pass with a cross coat. Any imperfections become visible when glazed!

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• **Application with roller or brush:**

- Use rollers with a uniform coating finish.
- Avoid roller edges, grain pockets and overlapping coats that have already begun to dry.
- Cut-in edges smoothly and seamlessly, wet-on-wet, together with the main area.
- For a brushed surface, use a BEECK Mineral Paint Brush or Oval Brush to spread without any particular direction.

• **Coats:**

- 1. Primer coat: mix with approx. 5 % - 10 % water to improve coatability.
- 2. Topcoat: After at least 12 hours; undiluted or made optimally coatable with no more than 5 % water.
- If applied carefully on uniform substrates, one coat can suffice, e.g. for renovation coatings. To do this, mix with around 5 % water and pay attention to uniform, void-free application.
- For wall glazing techniques it is generally advisable to apply two coats of AGLAIA Structural Casein Paint. This can be used as a white glaze base, which enhances the brilliance and light reflection of the brightly coloured, watercolour-like glaze. AGLAIA Structural Casein Paint can also be tinted as a pastel colour, advisable for earthy, muted "semi-glazes".

3. Application rate and Container Sizes

The application rate, i.e. the quantity required for smooth, normally absorbent substrates is approx. 0.14 - 0.15 kg per m² and pass. Try on a test area on site to determine consumption and the number of coats required.

Container sizes: 1 kg / 6 kg / 18 kg

4. Cleaning

Clean equipment, tools and soiled clothing thoroughly with water immediately after use.

5. Storage

Stored cool and frost-free in the original container can be kept for at least 12 months. Use up opened container as soon as possible.

6. Hazard notes, Safety instructions and Disposal

Comply with the safety data sheet. Safety data sheet available on request. This product is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008. Keep out of reach of children. Do not get in eyes, on skin, or on clothing. Avoid release to the environment. Dispose of contents/container to hazardous or special waste collection point. May produce an allergic reaction. Do not breathe vapours, dust or spray mist. Carefully protect the area surrounding the surface to be coated, wash off splashes immediately with water. Disposal in accordance with the official regulations.

- Waste disposal number: 080112

7. Declaration

This technical information is offered as advice based on our knowledge and practical experience. All information is provided without guarantee. It does not release the user from their responsibility to check the product suitability and application for the specific substrate on which it is to be used. Subject to change without notice as part of our product development. Non-system additives for tinting, thinning, etc. are not permitted. Check the colours before use. This information sheet automatically becomes invalid when a new edition is issued. The information in the current version of the Safety Data Sheets is binding for classification according to the Hazards identifications, disposal considerations, etc.