



BEECK Full Tone Lime Concentrate

Lightfast mineral pigments, mixed as paste in wood-burned, Soaked Marble Lime. For tinting interior lime wash and lime casein paints and for fresco painting

1. Product Properties

BEECK Full Tone Lime Concentrate is suitable for individual pastel coloured tinting of BEECK Lime Wash and Lime Casein Paints for historical decorative painting, decorating and church painting. Can also be used as full colour in fresco technique on fresh lime plaster. Fine grinding of the lightfast and lime-fast mineral pigments for maximum spreading rate and colour strength. Due to the chemical carbonation process, forms a microporous unit with the calcitic substrate and lends historical building materials a genuine lime character.

1.1. Composition

- Wood-burned, redispersed slaked marble lime of the highest chemical purity with at least three years' soaking period and optimum fine crystalline grain distribution
- Finely ground, lightfast mineral pigments
- Low organic additives (< 2 %) to stimulate pigment incorporation and carbonation

1.2. Technical properties

1.2.1. Overview

- Use on interior surfaces, preferably for historical listed buildings
- Unlimited lightfastness and UV stability
- High yielding and intensely coloured
- Materiality and look and feel suitable for listed buildings
- Matt with bright, transparent lime lustre
- Capillary-active and moisture regulating
- Maximum carbon dioxide permeability
- Can be coated over practically an unlimited number of times, as is non film-forming
- Low-tension and free from electrostatic charging
- Nonflammable
- Natural alkalinity helps to prevent bacteria and mould

1.2.2. Important building physics characteristics*

Parameter	Value	Conformity
Density 20°C:	1.12 – 1.33 kg / L	
pH value 20°C:	11	
Dynamic viscosity 20°C:	approx. 3,200 mPas	
W ₂₄ value:	> 1.00 kg / (m ² h ^{1/2})	
s _d value (H ₂ O):	0.02 m	
Colourfastness:	Class A2	BFS Information Sheet No. 26
Gloss level at 85°:	dull matt	EN ISO 2813
Flammability class:	A2 nonflammable	EN 13501-1, DIN 4102
VOC content (max.):	2 g / L	ChemVOCFarbV Cat. A / a

* Values depend on colour

1.2.3. Colour

- 11 full colours of the BEECK Mineral Paint Colour Chart:
Ochre Yellow, Umber, Brown, Oxide Red, Wine Red, Black, Green, Lemon Yellow, Maize Yellow and Cobalt Blue. Limefast full colour Ultra Blue can only be produced with limitation, please check beforehand.
- Maximum quantity of BEECK Full Tone Lime Concentrate added to BEECK Lime Wash and Lime Casein Paints: 20 %
- Due to the system and substrate, especially where tinted and full coloured 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

- In the case of historical buildings, consult the site engineers and the building conservation authority.
- Treat substrates carefully; carry out preliminary restoration investigations and documentation as required.
- Use only on porous, absorbent and water-wettable mineral lime-compatible substrates.
- The substrate must be clean, dry, firm and stable and must be free from efflorescent and separating substances.
- Test new plaster for drying and strength.
- Carefully make good chipped surfaces, cracks and misses with the same type of material and texture.



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- Before coating, prewetten absorbent substrates and allow to dry on until matt-damp.
- Ensure uniform substrates and careful application on critical and high visual quality surfaces and in glancing light.

2.2. Brief information on the standard system as a full colour coating

If using as a semi-glazing full colour coating, it is necessary to use in the classic fresco technique on fresh lime plaster to achieve a wipe-resistant coating result. To this end, thin BEECK Full Tone Lime Concentrate with 3 - 4 parts water and apply as a glaze several times within one working day, before the plaster has set.

2.3. Substrate and preparatory treatment

- **(Air)lime plaster (PI, CSI-II), lime-cement plaster (PII), renovation plaster, readily water-wettable:**
If necessary, grind off or etch sinter skin. Primer coat on freshly felted new plaster, fresco as described above. Prewetten old plaster and leave to dry on until matt damp, not very suitable for lime wash paints!
- **For tinted BEECK Lime Wash and Lime Casein Paints:**
Please note and follow the respective technical data sheet.
- **Unsuitable substrates** are gypsum-based substrates, for example, gypsum plaster, stucco and gypsum board. Equally, film-forming coats, for example, oil, latex and synthetic resin coatings and organic substrates such as plastics and wood-based materials.
- **Defective substrates** require a differentiated approach. Care is needed when working on efflorescent and saponifiable substrates. Apply a renovation plaster on damp, salt contaminated surfaces, basement walls and base areas, as well as areas with hygroscopic or rising damp.

2.4. Application instructions

2.4.1. General information

BEECK Full Tone Lime Concentrate is intended for use in tinted lime wash coatings in listed building conservation and church painting. Experience in lime paint techniques and lime-compatible substrates is indispensable for a wipe-resistant coating result. It is essential to produce a work sample and to try out the product on a test area of the original substrates. Please always note the following: Colour fluctuations, chalking and sintering can occur, depending on the substrate, room climate and use. Hazy drying on non-uniform substrates and the tendency to form water markings are also typical for lime. These effects explicitly do not constitute a product defect. Check substrate suitability as required (see 2.1 and 2.3). Pay particular attention to the absorbency, strength and texture of the respective substrate. Ensure that the product is used by qualified persons only. Trying out on a test area of the original substrates on site is indispensable for lime wash paints.

- Carefully cover surfaces which are not to be treated – especially glass, ceramics, window sills, expansion joints, lacquer and anodic coatings – 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!
- Only use containers from the same production batch to coat self-contained areas.
- Especially when using tinted coatings, ensure sufficient qualified workers and a smooth, uninterrupted coating process.
- Before and during use, stir thoroughly with powered mixing paddle and sieve occasionally.
- Do not use in wet conditions, if there is a risk of frost or on hot surfaces.
- Prewetten absorbent substrates and allow to dry on until matt-damp.
- Minimum application temperature: +8°C
- Drying time: at least 16 hours per coat, except when using in the fresco technique.
- High humidity stimulates carbonation.
- Paint over wipe-resistant coatings only.

2.4.2. Application

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

- **As full colour for fresco painting:**
Thoroughly stir BEECK Full Tone Lime Concentrate and thin with 3 – 4 parts water.
- **For tinting BEECK Lime Wash Paints, such as BEECK Calcidin and BEECK Calcidan:**
Stir BEECK Full Tone Lime Concentrate thoroughly and stir into the paint to be tinted with a powered mixing paddle. Add 20 % maximum. Before use, thin tinted paint with water and sieve.
- **For tinting BEECK Lime Casein Paint:**
Stir BEECK Full Tone Lime Concentrate thoroughly and stir into the mixed Lime Casein Paint paste with a powered mixing paddle. Add 20 % maximum. Before use, thin tinted paint with water and sieve.



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3. Application Rate and Container Sizes

The application rate, i.e. the quantity required for full colour coatings, thinned with 4 parts water, is approx. 0.02 L BEECK Full Tone Lime Concentrate per m² and coating. Try out on a test area on site to determine application rate differences and the number of coats required.

Container sizes: 0.75 L / 5 L

4. Cleaning

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

5. Storage

Stored cool and frost-free in the original container, closed airtight, BEECK Full Tone Lime Concentrate can be kept for at least 12 months. Cover the contents of partially used containers with water and sieve before further use. Use tinted BEECK Lime Casein Paint within 1 week.

6. Hazard notes, safety instructions and disposal

Comply with the EC Safety Data Sheet. Safety data sheet available on request.

Hazardous components which must be listed on the label: Calcium hydroxide

Signal word: Danger

Pictograms: GHS05-GHS07

Hazard statements: Causes skin irritation. Causes serious eye damage. May cause respiratory irritation.

Precautionary statements: Keep out of reach of children. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Disposal in accordance with the official regulations.

Waste disposal number: 080111

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 EC Safety Data Sheets is binding for classification according to the Hazards identifications, disposal considerations, etc.