



# BEECK Undercoat *pro*

**Matte-white oil undercoat for professional undercoats on wood and ferrous metals for indoor and outdoor use**

## 1. Product properties

Opaque white filler, quick-drying high-solid undercoat for wood, engineered woods and ferrous metals in indoor and outdoor applications. Also as bonding film for intermediate coats on high-bonding old coats based on oil and alkyd resins. Low-stress and high-bonding with outstanding settling and edge cover. No propensity to peeling even in high-weather exposure. White, can be tinted for tinted or solid colour topcoats. Continue treating in outdoor use with BEECK Exterior Stand Oil Paint *pro* glossy or satin sheen. Ideal for windows, door, shutters, and trim. Primer untreated lumber with BEECK Primer *pro*, primer ferrous metals with BEECK Corrosion Protection Primer.

### 1.1. Composition

- Thin linseed oil pre-paint made of siccativated enamel linseed-oil and modified linseed-oil stand-oils.
- Organic solvents
- Opaque white pigmented with titanium oxide, filled with talcum, chalk, and silica fillers
- Free of softeners and biocides.

### 1.2. Technical properties

#### 1.2.1. Overview

- For indoor and outdoor use.
- High-yielding, painter-friendly, professional-grade
- Active drying properties, good settling and edge protection
- Ideal for renovation coats
- High-bonding on a variety of substrates
- Low surface tension, no propensity to chipping
- Appropriate for historical structures based on traditional recipes

#### 1.2.2. Important construction characteristic values

| Parameter                                | Value                             | Conformity               |
|--|-----------------------------------|--------------------------|
| Density <sub>20°C</sub> :                | 1.47 – 1.50 kg / L                |                          |
| Viscosity:                               | approx. 140 s, 3 mm viscosity cup | ISO 2431                 |
| s <sub>d</sub> value (H <sub>2</sub> O): | ≥ 0.50 m                          |                          |
| Sheen at 85°:                            | matte                             | EN ISO 2813              |
| Flashpoint:                              | 36°C                              |                          |
| VOC content (max.):                      | 300 g / L                         | ChemVOCFarbV, cat. A / d |
| Solids concentration:                    | approx. 80 % (High Solid)         |                          |

#### 1.2.3. Colour hue

- White and BEECK stand-oil colour chart, NCS and RAL colours.

## 2. Processing

### 2.1. Substrate requirements

- The substrate must be clean, dry, solid, and have good adhesion. It must also be free of efflorescent, discolouring, adhesion-inhibiting substances and/or drying-inhibitors.
- Observe design-based wood protection and ensure wood is free of mold; match chemical wood protection.
- Bare ferrous metals or steel, suited for corrosivity classes C1 – C3 iaw. EN ISO 12944-2. Not for galvanized sheet metal, anodized or non-ferrous metals.

### 2.2. Abbreviated information for standard application

- **On dimensioned and visually demanding lumber (windows, doors, each on all sides):**
  - Primer with BEECK Primer *pro*
  - Intermediate coat with BEECK Undercoat *pro*; white or tinted
  - Topcoat with BEECK Exterior Stand Oil Paint *pro*; white or tinted
- **On all other woods (half-timbered, cladding, dormers, etc.) depending on weathering and need:**
  - Primer with BEECK Primer *pro*, alternatively with BEECK Oil Primer (on highly-absorbent wood)
  - Intermediate coat with BEECK Undercoat *pro*; as needed; white or tinted
  - Topcoat with BEECK Exterior Stand Oil Paint *pro*; white or tinted
- **On ferrous metals and steel:**
  - Primer with BEECK Corrosion Protection Primer
  - Intermediate coat alternatively with BEECK Undercoat *pro*; white or tinted
  - One or two topcoats with BEECK Exterior Stand Oil Paint *pro*; white or tinted



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### 2.3. Substrate and pretreatment

- **Wood:**

Surface sand absorbent, bare, or not film-forming, impregnated wood and primer with BEECK Primer *pro*. Saturate highly-absorbent, spongy, or leached outdoor wood with BEECK Oil Primer, brush out excess. Completely sand down or replace crumbling or grayed wood. Maximum wood moisture content: coniferous wood: 15%, deciduous wood: 12%. Thoroughly wash off grease and wax with BEECK Lacquer Thinner. In hot temperatures, note that resin-rich exterior wood (e.g. lark) tends to exhibit resin flow on south-facing sides. Oak (tannic acid) and tropical woods (discolouring, drying inhibitor ingredients!) and engineered woods must be tested; take note of suitability for outdoor applications and manufacturer's corresponding coating guidelines. Sand, blast, or etch down to pores any weathered, cracking, loose, and peeling old paint based on enamel, acrylic, or synthetic resin. Remove paint stripper residue down to pores. Thoroughly sand high-bonding, adhering oil and alkyd resin paints to a matte finish, continue treating directly with BEECK Undercoat *pro*. Prior to install, primer all sides of structural lumber and dimensioned lumber and prepaint with one additional coat of BEECK Undercoat *pro*.

- **Glass rebates and sealants (windows):**

Do not paint over elastic sealing compounds, limit paint on sealing compound to 1 mm film thickness. Where specified by the manufacturer, paint over plastic sealing compounds; test compatibility. Before painting over, allow curing sealing compounds, e.g. linseed-oil putty, to dry thoroughly; observe manufacturer's instructions.

- **On ferrous metals and steel:**

Remove rust thoroughly, surface-sand, then degrease with BEECK Lacquer Thinner, pretreat with BEECK Corrosion Protection Primer and BEECK Undercoat *pro*, or two topcoats with BEECK Exterior Stand Oil Paint *pro*.

- **Unsuited substrates** include horizontally installed woods or woods exposed to weather at a slope, exposed to heavy mechanical loads, and those with ground contact. Take note of design-based and any applicable chemical wood protection iaw. DIN 68800 part 3. Test tropical woods, oak, engineered woods. Plasto-elastic, low-bonding, and brittle old paint, e.g. on acrylic basis, cannot be painted over. Galvanized sheet metal, non-ferrous metals, and areas at high corrosion risk are also unsuited.

- **Deficient substrates** call for a differentiated approach and testing.

### 2.4. Processing instructions

#### 2.4.1. General instructions

- Verify substrate suitability. Note absorption capacity, strength, and texture of the relevant substrate. Test demanding and critical surfaces. Ensure qualified processing. Supply personal protective gear.
- Carefully cover and protect untreated surfaces, in particular glass, window sills, expansion joints, paint coats, plastic, and hardware against overspray.
- Paint self-contained surfaces exclusively with containers from the same manufacturing batch.
- Test colour prior to processing.
- Intermediate coat with BEECK Undercoat *pro* in the same colour with topcoat.
- Do not process when wet, risk of frost, on heated surface or in full sun.
- Minimum processing temperature: +8°C. For drying, ensure ventilation and heat (room temperature), treat fresh coats with care.
- Drying time: in standard climate (20 °C / 65 % rH), dust-dry after 2 – 3 hours, can be sanded and painted after approx. 12 – 24 hours. Plan for longer waiting times in unfavorable drying conditions. Only paint over dried coats. Avoid excess film thickness and painting shut, e.g. in the window gap.
- Protect fresh outdoor coats from rain, hang scaffolding tarps.

#### 2.4.2. Processing

- Process with ring brush, flat brush, enamel roller, or with spray method (low pressure, high pressure, airmix). Mix thoroughly and screen as needed before use.
- Apply a thin and even coat, blending in the material. Note thorough edge coating. Avoid excessive film thickness. Brush out thoroughly also on sawmill finish gaps, and in groove and gap areas and in depressions.
- Dilute as needed with up to 3% BEECK Lacquer Thinner, specifically on absorbent and rough substrates and when spraying.
- Wait at least 12 - 24 hours before sanding between coats (wet if needed), remove dust and paint over.
- Avoid excessive film thickness even when spraying. Carefully brush out excess with brush, in particular on horizontal surfaces, do not allow puddles, drip edges or runs to dry in gaps and pockets. Recommended maximum wet film thickness: 80 – 120 µm. Test application recommended. For oily airborne spray, note spontaneous combustion hazard in vacuum collector filter pads.

### 3. Yield and container sizes

Yields 0.08 – 0.10 L per m<sup>2</sup>. Determine additional consumption in test coats.

Container sizes: 0.75 L / 2.5 L / 10 L



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### 4. Cleaning

Thoroughly clean equipment, tools, and soiled clothing with BEECK Lacquer Thinner immediately after use.

### 5. Storage

Min. shelf life: 12 months when kept tightly sealed in original container. Seal opened containers airtight. Remove, do not mix in any skin. Never transfer product into solvent-swelling containers.

### 6. Hazard notices, safety instructions, and disposal

Note EC Safety Data Sheet. Safety Data Sheet available on request.

Warning. Flammable liquid and vapour. May cause drowsiness or dizziness. Harmful to aquatic life with long lasting effects. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Call a POISON CENTER or doctor if you feel unwell. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Store in a well-ventilated place. Keep cool. Store locked up. Contains TURPENTINE OIL, 2-BUTANONE OXIME. May produce an allergic reaction. Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting self-closing lids, or laid out flat in a single layer to dry, or placed in a closed metal container soaked with water. Dispose in compliance with statutory regulations.

- Waste code for residual product: 080111

### 7. Declaration

This technical information is intended to advise you based on our findings and practical experience. All notices are non-binding. They do not relieve the user from performing their own substrate-dependent tests for product suitability and processing method. Technical changes due to product development made without notice. Third-party additives for tinting, diluting, etc. are not approved. Test colour prior to processing. This leaflet automatically expires when a revised edition is published. The details in the EC Safety Data Sheets in their current version are binding for the classification as per hazmat directive, disposal, etc.