



>Product description

Hesse NATURAL-OIL is an innovative mixture of natural oils and natural oils modified with alkyd resins. Its mild solvent and particularly the cobalt- and lead-free siccatives mean this oil is especially fast drying. It is non-classified under the current version of the GHS/CLP Regulation. It accentuates the wood substrate and after drying it creates a tough yet open-pore and breathable surface, which has good abrasion resistance and great resistance against household chemicals. Apply 1 to 2 coats of the oil using a spatula, roller or cloth and rub it in with a sanding fleece or something similar. Allow a brief absorption period and then remove the excess from the surface. Hardening is optional.

>Areas of application

For use on the surfaces of indoor furniture, parquet flooring and staircase treads with normal to high use. Chemical and mechanical resistance will depend on the number of oil coats applied.

>Surface Preparation

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|---------------------------------|--|
| Surface preparation | In the furniture sector: Clean, well seasoned wood, depending on species, application process and the desired effect. On parquet flooring: Careful, even and graduated bare wood sanding of properly laid and prepared parquet surface. |
| Substrate sanding grits from-to | 120 - 320 |
| Comments on sanding | The raw-wood sanding must be adapted to the required application quantity; the lower the application quantity, the finer the sanding grit (up to grit 240 when buffing). Ensure that the edge sanding and surface sanding are even. The sanding quality is crucial in ensuring a good quality of the final coat! |

>Finishing

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| Finishing | After adequate drying. On furniture: regular cleaning and care using Proterra Cleaning agent GR 1900. On parquet flooring: initial care and subsequent maintenance using Hesse PROTECT-CLEANER PR 90 or Hesse ANTISLIP-CLEANER PR 93 and Hesse INTENSIV-CLEANER PR 91. Optional, additional sealing: Surfaces treated 2 x with the oil at a mixing ratio of 25 : 1 with OIL-HARDENER HIGH-SOLID OR 5180 can be sealed without sanding using Hesse HYDRO Seals (e.g. PURA-ONE HDE 51-(gloss level) or PURA-NATURA HDE 52-0) after drying over night at 20 °C room temperature with sufficient air circulation. If the oil surface is older than 16 h / 20 °C, it should be lightly sanded back (do not sand through it!) to achieve a good surface result. This additional sealing will influence the colour tone, feel and look of the surface. Please assess this based on a trial coating. |
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>Times

| | |
|---------------------------|---------------------------------------|
| Working Temperature Range | 20 - 40 °C |
| conditions of transport | frost-free - up to a maximum of 35 °C |
| Drying | 6 h / 20 °C |
| Subsequent coating within | 24 h / 20 °C |
| Complete drying | 24 h / 20 °C |
| Accessible after | 24 h / 20 °C |

>Times

Load bearing after 7 d / 20 °C

>Application

| Application | Nozzle size in mm | Spray pressure in bar |
|-------------------------|-------------------|-----------------------|
| Manual application -all | | |
| Gauze pads / cloth | | |
| Spraying | | |
| Compressed air spraying | 1,5 - 1,8 mm | 2,0 - 3,0 bar |
| Wiping with a cloth | | |

>Processing instructions

Manual filling:

Apply thinly with a trowel or roll on, then immediately pad in or rub in. Large areas should be coated by two people.

Manual application:

Rub in using a sanding fleece and remove any excess with a cotton cloth, leaving no residue. In the furniture sector: apply and rub in the product with a saturated fine sanding fleece. After a short exposure time, remove any excess with a cotton cloth. The surface should appear dry; if not, drying problems may occur. On parquet flooring: Apply the material with an appropriate trowel; after a short exposure time, work in evenly using the single-disc sander and white non-abrasive pad until the surface appears dry.

>Technical data

| | |
|---|--|
| Proportion of renewable raw materials % | 23.8 - 30.4 |
| Flow time (+/- 15 %) | 75 s / DIN EN ISO 2431 - 4 mm |
| Appearance | colourless |
| Decopaint basis | LB |
| Decopaint category | J |
| Density series kg/l | 0.88 |
| Yield per coat | 29 - 88 m ² /l The spreading rate is heavily dependent on the type of application. The specifications relate to a liter of ready-for-use product, if necessary including hardener and thinner. |
| Giscode | KH1 |
| Form of delivery | fluid |
| Non-volatile content series % | 43 - 47 |
| VOC EU % | 56 % |
| VOC FR | C |
| Working Temperature Range | 20 - 40 °C |
| Storage temperature | 15 - 25 °C |
| Shelf life in weeks | 52 |
| conditions of transport | frost-free - up to a maximum of 35 °C |
| Working temperature | 20 °C |
| Number of coats (max) | 2 |
| Amount per layer (minimum) | 10 g/m ² |
| Amount per layer (max) | 30 g/m ² |
| Total application volume | 60 g/m ² |

>Ordering information

| Order number | Gloss level 60° (Gloss) | Gloss level | Container Size |
|--------------|-------------------------|-------------|----------------|
| OE 52832 | 8 - 12 | matt | 1 l, 3 l, 25 l |
| OE 52839 | ≥ 90 | high gloss | 1 l, 3 l, 25 l |



>Thinners

| Order number | Product description | Container Size |
|--------------|---------------------|---------------------|
| OV 89 | OIL-THINNER | 1 l, 3 l |
| OV 5100 | Special thinner | 1 l, 3 l, 5 l, 25 l |

>Cleaning agent and care product

| Order number | Product description | Container Size |
|--------------|---------------------|-----------------------|
| PR 90 | PROTECT-CLEANER | 1 l, 3 l, 15 l, 25 l |
| GR 1900 | Cleaning agent | 1 l, 2.5 l, 3 l, 25 l |
| OE 88-2 | PROTECT-OIL | 1 l |

>Supplementary products

| Order number | Product description | Container Size |
|--------------|-------------------------|------------------------------|
| OR 5180 | OIL-HARDENER HIGH SOLID | 0.25 l, 1 l, 3 l, 15 l, 25 l |

>Particular instructions

The product is not suitable for woods susceptible to blue stain in damp rooms. The material properties were tested on commercially available woods such as oak, beech, etc. Please check suitability before using on other types of wood. In order to avoid white pores on dark, porous woods, we recommend using the glossy version of the oil, at least for the first coat. Hardening at 100 : 4 with OR 5180 increases the surface's mechanical and chemical resistance. The hardener additive accelerates complete drying. Pot life of the mixture at 1 h / 20 °C room temperature. Chemical and mechanical resistance depends on the number of coats of oil that are applied. The material dries with oxidation – please observe the general application instructions. Films or carpets must not be placed on the parquet flooring until it has completely hardened. Skin may form due to the high reactivity. Please remove before agitating. Subsequently the material should be filtered as a precaution. Stir carefully before use. Please observe the latest material safety data sheet!

>Sample process

Parquet: rustic oak planks, oiled matt

Bare wood sanding: 150 grit/screen with subsequent dust removal. Use a spatula to apply 1 x 15 - 20 g/m² Hesse NATURAL-OIL OE 52832. Allow a brief absorption period and then work it in using a single-disc sander with white pad until the surface appears dry. Drying: at least 16 h / 20 °C room temperature and with adequate air exchange.

Use a spatula to apply 1 x 15 - 20 g/m² Hesse NATURAL-OIL OE 52832. Allow a brief absorption period and then use a single disc sander with white pad to work it in until the surface appears dry. Drying: at least 16 h / 20 °C room temperature and with adequate air exchange. The parquet is then accessible with care. Full resilience is achieved after at least 7 d / 20 °C room temperature and sufficient air exchange.

Living room shelving: oiled walnut, satin gloss

Bare wood sanding: 320 grit with subsequent dust removal. Use a fine sanding fleece to apply 1 x 10 - 20 g/m² Hesse NATURAL-OIL OE 52839 and rub in evenly. Allow a brief absorption period and then use a soft cotton cloth to remove the excess until the entire surface appears uniformly dry. Drying: at least 16 h / 20 °C room temperature and with adequate air exchange.

Use a fine sanding fleece to apply 1 x 10 - 20 g/m² Hesse NATURAL-OIL OE 52839 and rub in evenly. Allow a brief absorption period and then use a soft cotton cloth to remove the excess until the entire surface appears uniformly dry. Drying: at least 16 h / 20 °C room temperature and with adequate air exchange. Packable: after at least 24 h / 20 °C room temperature with sufficient air circulation. Full resilience is achieved after at least 7 d / 20 °C room temperature and with adequate air exchange.

>General information

Materials with oxidative drying: a skin can form on the surface in containers, mainly opened containers. This should be removed prior to use. Low temperatures, increased ambient humidity, inadequate air exchange and wood contents that inhibit drying can extend the oil's drying time.

The risk of spontaneous combustion means that coating substances generating heat during drying (oxidative drying oils) and coating substances forming highly flammable deposits may not be applied in the same spray booth without further precautions (see BGR 500, section 3: Handling different coating substances). Cotton cloths, cardboard and paper saturated with oil pose a risk of spontaneous combustion due to heat accumulation. They should therefore be spread out in the air to dry before being disposed of. Even oil-saturated wood dust is prone to spontaneous combustion; as a precaution please do not dispose of it in sealed containers and, where possible, do not use the spray booth for sanding. The oil itself does not combust spontaneously.

The necessary cleaning, care and refresh intervals should be matched to the number of layers of oil applied and the nature and intensity of use. The material properties have been tested on commonly available woods, such as oak, beech, etc. Resins in softwoods, coloured woods and exotic or unusual wood species can result in delayed drying and optical impairments. Please therefore check for suitability prior to use on such woods. Please also note that oils, like almost all natural materials, change colour over time under the influence of light and heat. Their colour can alter both under the influence of light (e.g. the sun's UV rays, etc.) and due to light deprivation (yellowing at absence of light, e.g. beneath tablecloths, carpets, cabinets, etc.). This can become particularly apparent on brightly pigmented substrates. Oiled surfaces have a distinctive odour. This diminishes in a matter of days with progressive drying. Cleaning and care instructions: Please observe the care instructions according to DIN 18356. Wipe parquet with a slightly damp but not wet cloth. Please use only neutral, silicone-free, ammonia free and non-abrasive cleaners. Regular care and cleaning with Hesse PROTECT-CLEANER PR 90 and Hesse INTENSIVE-CLEANER PR 91 increases the durability of a (parquet) surface.

>Particular properties and/or testing standards

| Test standard / basis | Testing laboratory | Mark | Report | No. |
|--|---|--|-------------------------|-------------------------|
| Product meets the requirements of solvent based paints and coatings regulation - ChemVOCFarbV (German ordinance on solvent-based paints and varnishes) - according to the national implementation of 2004/42/EG ("Decopaint Directive"). | HESSE |  | | |
| Saliva and sweat resistance according to DIN 53160 Parts 1 and 2: no discolouration (Level 5) | HESSE |  | | |
| Non-slip class R10 per DIN 51130 | SFV |  | Test certificate number | 82611807.001 (OE 52832) |
| Toy safety DIN EN 71-3 (2014-12) | OST-THÜRINGISCHE MATERIALPRÜFUNGSGESELLSCHAFT |  | Test report | 2.5/127/2018 |
| Emission-tested construction product per DIBt [German institute for construction technology] principles, | DIBt |  | Approval no. | Z-157.10-240 |

Technical information

Hesse NATURAL-OIL OE 5283x(gloss level)

Our technical information is continually adapted to keep up to date with the latest technology and statutory regulations. The indicated values are no specification, but typical product data. The latest version is always available online at www.hesse-lignal.de or talk to your local account manager. This information is for advice and is based on the best knowledge available and careful research in line with the current state of the art. This information cannot be held as legally binding. We also refer you to our terms and conditions of business. Safety data sheet is provided in accordance with EC regulation no. 1907/2006.