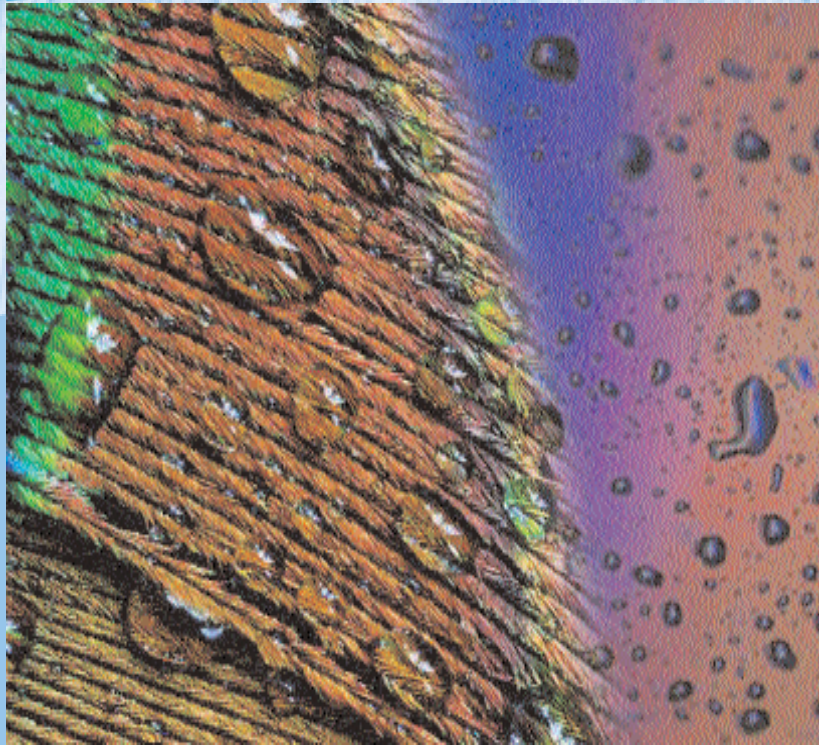


STAINS



Hesse Hydro stains are known for their manifold effect variations and especially easy processing for many years. They are environmentally conscious, because their formulation is based on water. Available are adjustments for spraying, brushing, dipping, or even roller coating. Depending on the kind of wood different systems are recommended, emphasizing or modifying the natural look of the wood.

With the aid of our stain-mixing system, your Hesse-Base Retailer can adjust manifold stain colour tones at short notice. You will find original colour tone samples in our stain cards Classic and Style, which are available against a protective charge.

Hesse lacquer stains mainly consist of light-fast dyestuffs and finest pigments, which are dissolved resp. dispersed in organic solvents like alcohols, esters, ketones etc. Their advantage over the waterborne stains lays in their fast drying, the very good features for wetting the wood and the non-roughening up of the substrate. The use of solvent ingredients guarantees good lacquer compatibility with solvent based lacquers and with it a fast recoatability. Hesse lacquer stains were primarily used for the rustic-style staining of oak and ash because of their very good coloration of the pores.

The chemical stains, likewise on basis of water, are the eldest known stain formulations. By chemical reaction with the natural wood ingredients a colour tone is generated, which is typical for these systems. The best known procedures from this product group are certainly the leaching of oak (reaction sodium hydroxide solution with tannic acid) or also the fumigating of oak (reaction ammonia steam with tannic acid). The colour tones of the chemical staining depend mainly on the wood quality, meaning the wood ingredients and thus they can be influenced only minimally.

Hesse Precious wood stain

Ready-for-use, environmentally conscious and very effective Hydro-stain with good light fastness, ideal for brilliant colour tones without accentuating the pores.

Fields of application

Specially for staining of mahogany, cherry tree, walnut, maple, oak, etc.

Processing hint

Spraying: Apply stain with reduced material feed evenly damp. On porous wood wipe and remove stain subsequently with wiping brush. Application with stain brush: Apply stain fully with surplus. Afterwards wipe and remove evenly in direction of the grains.

Important advices

In order to get intermediate colour tones and own shades, all Hesse-Precious wood stains BE ...-(colour tone) can be mixed with each other. Shading with Hesse-Colour concentrates BF (colour tone). Brightening by addition of water. Stir-up or shake well!

Always make a test staining with finish!

Storage: Protect from frost.

Hesse Priming stain

Ready-for-use, slightly equalizing Hydro-stain with good light-fastness, e.g. also suitable for the adjustment of wood-strange stain colours in the grey colour range.

Fields of application

For furniture manufacturing and in the interior sector, for all kinds of wood

Processing hint

Spraying: Apply stain evenly damp. On porous wood wipe and remove stain subsequently with wiping brush. Application with stain brush: Apply stain fully with surplus. Afterwards wipe and remove evenly in direction of the grains.

Important advices

All BG stains can be mixed with each other. Shading: according to desired effect and colour tone with Hesse-Colour concentrates of the series BF(colour tone) and/or with BP(colour tone).

Brightening by addition of water. Stir-up or shake the concentrates well!

Always make a test staining with finish!

Storage: Protect from frost.

Order information

Order no:

For mahogany **BE 15-(colour tone)** with wiping

For cherry tree **BE 63-(colour tone)** without wiping

For walnut **BE 35-(colour tone)** with wiping

For oak **BE 5-(colour tone)** with wiping

For maple **BE 68-(colour tone)** without wiping

For beech **BE 18-(colour tone)** without wiping

Packaging sizes: 1/5/10/25 litres

Thinner: Water

Efficiency

per litre: 6-8 m²

Special colour

tones: On request

Subsequent

treatment: With all Hesse CN- and PUR-lacquers and 2-C-Hydro Multicoat lacquers (First layer of hydro lacquer must dry for at least 16 h).

Due to the danger of dyestuff bleedings, finish with 1-C-Hydro materials not recommended!

Order information

Order no:

For mahogany **BG 15-(colour tone)** with wiping

For cherry tree **BG 63-(colour tone)** without wiping

BG 65-(colour tone) with wiping

For walnut **BG 35-(colour tone)** with wiping

For oak **BG 5-(colour tone)** with wiping

For maple **BG 68-(colour tone)** without wiping

For beech **BG 18-(colour tone)** without wiping

BG 20-(colour tone) with wiping

Packaging sizes: 1/5/10/25 litres

Thinner: Water

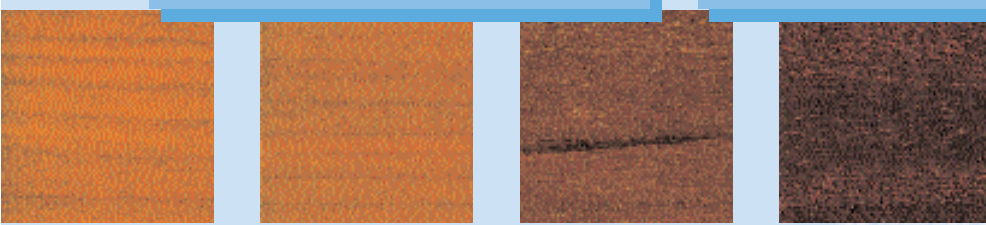
Efficiency

per litre: 6-8 m²

Special colour tones: On request

Subsequent treatment: With all Hesse CN- and PUR-lacquers and 2-component-Hydro multicoat lacquers (first layer of Hydr lacquer must dry for at least 16 h).

Due to the danger of dyestuff bleedings, finish with 1-C-Hydro materials not recommended!





Hesse Positive stain

Ready-for-use, one-component HYDRO-stain with a strong positive stain effect on coniferous wood.

Fields of application

For structure brushed or coarsely sanded coniferous wood, e.g. spruce or fir. Ideal for strained living furniture, ceilings and walls in the style of soft wood.

Processing hint

One application by spraying of 60-80 g/m² without wiping off, exclusively on coniferous wood.
Structure brushed coniferous wood emphasizes the positive effect! Application by brush is only conditionally possible for low dyed positive stains; dark colours tend to formation of spots because of the irregular wood wetting! Apply the stain as even as possible and wipe it off with a wiping brush afterwards.

Important advices

All BT 58-stains can be mixed with each other
Shading with special Hesse colour concentrates
BF 2010 yellow
BF 2080 orange-brown
BF 2090 black
BF 1880 brown
Brightening with BT 58-20060, colourless.
Stir or shake the concentrates well!
Always make a test staining with finish!
Storage: Protect from frost.

- Resin-containing wood (e.g. pine, Carolina-pine) should be washed out with Hesse Wood Soap HBV 243 before staining. Forced drying affects the positive effect.

Order information

| | |
|-----------------------|---|
| Order No.: | BT 58-(colour tone) |
| Packaging sizes: | 1/5/10/25 litres |
| Efficiency per litre: | 6-8 m ² |
| Special colour tones: | On request |
| Thinner: | BT 58-20060 colourless |

Subsequent treatment: With all Hesse CN- and PUR-lacquers. We recommend to use Hesse-Natural Wood Effect DA 400-1 for light stain colours.

Finish with Hydro lacquers only possible after previous isolation with PUR lacquer.

Hesse Gloss stain

Ready-for-use, wax-containing one-component HYDRO-stain with strong positive effect on coniferous wood. The natural surface alternative in the interior sector, as it is applicable without lacquer finish.

Fields of application

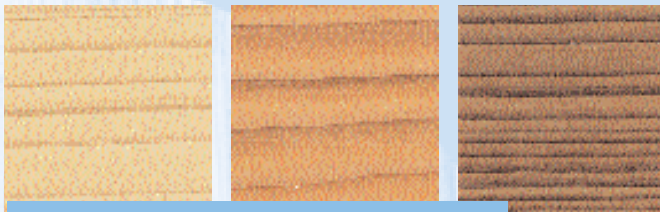
For structure brushed, sanded or coarsely sanded coniferous wood, (e.g. fir or spruce). Ideal for low strained living furniture, ceilings and wall panellings.
Not water-resistant.

Processing hint

One application of 60-80 g/m² without wiping off, exclusively on coniferous wood.
Apply stain wet. Do not wipe possible surplus.
Brush to gloss effect after drying.
Structure brushed coniferous wood emphasizes the positive effect!
Stir or shake the stains well before use!


Important advices

All BU 58-stains can be mixed with each other
Shading: with Hesse colour concentrates BF (colour tone).
Brightening with BU 58-21500, colourless.
Stir or shake the concentrates well before use!



Order information

| | |
|-----------------------|---|
| Order No.: | BU 58-(colour tone) |
| Packaging size: | 1/5/10/25 litres |
| Efficiency per litre: | 6-10 m ² |
| Thinner: | BU 58-21500 colourless |
| Special colour tones: | On request |



Hesse Hydro Rustic stain

Ready-for-use Hydro-stain for oak with strong rustic-style accentuation of the pores and very low roughening of the wood.

Fields of application

For furniture manufacturing and in the interior sector.

Processing hint

Stir and shake the stains well before use!
One application by spraying of 60-80 g/m² with wiping only directly on the substrate. Apply the stain even and wet. Wipe off the surplus with a broad wiping brush first across, then along the wood grains. Application by brush: Apply the stain with surplus, afterwards wipe off the surplus with a broad wiping brush first across, then along the wood grains.

Important advices

All BN 5- stains can be mixed with each other
Shading: according to the desired effect and colour tone with Hesse colour concentrates of the series BF- (colour tone) and / or with BP- (colour tone).
Brightening by addition of water.
Stir or shake the concentrates well!
Always make a test staining with finish!
Storage: Protect from frost.

Hesse Colour stain

Ready-for-use, environmentally conscious HYDRO-pigment stain. Light-fast finest pigments cover the wood substrate to a large extent, however, the desired stain features are still obtained.

Fields of application

For furniture manufacturing and in the interior sector. Especially for grey, pastel and full colours on ash and oak but also suitable for beech, spruce, fir etc.

Processing hint

Stir and shake the stains well before use! One stain application only directly on the raw wood. Spraying with wiping: Apply the stain even and wet, wipe off the surplus with a wiping brush in direction of the wood grain (equalizing). Application by brush: Apply the stain well with surplus by a stain brush, afterwards wipe off the surplus with a wiping brush in direction of the wood grains.

Important advices


All BC stains can be mixed with each other
Shading with Hesse colour concentrates of the series BP- (colour tone).
Stir or shake the concentrates well before use!
Increase the transparency by addition of water.
Always make a test staining with finish!
Storage: Protect from frost.

Order information

| | |
|-----------------------|----------------------------|
| Order No.: | BN 5- (colour tone) |
| Packaging sizes: | 1/5/10/25 litres |
| Efficiency per litre: | 6-10 m ² |
| Thinner: | Water |

Subsequent treatment: With all Hesse CN- and PUR-lacquers and 2-component-Hydro multicoat lacquers (first layer must dry for at least 16 h). Finishing with 1-component-Hydro materials is not recommended, because of the danger of dye-stuff bleeding!

Order information



| | |
|-----------------------|----------------------------|
| Order No.: | BC .- (colour tone) |
| Packaging sizes: | 1/5/10/25 litres |
| Thinner: | Water |
| Efficiency per litre: | 6-10 m ² |

Subsequent treatment: With light-fast Hesse PUR-Base coats, Multicoat lacquers and Top coats, e.g. DE 55. and DE 56.. Transparent stains in full colours also with 1-C and 2-C Hydro multicoat lacquers, e.g. HE 60.

Hesse Relief glaze

Lightfast Hydro glaze for distinct positive effects on structured carriers, mainly conifers

Fields of application

For furniture manufacturing and in the interior sector.

Processing

Carrier: finely grained spruce/fir, as solid wood or veneer of at least 0,7 mm, better 1 mm thickness

Pre-treatment: Produce a deep structure on the raw wood with a plastic sanding brush.

Clean from dust.

Base coating with 1:1 diluted white, lightfast pigment fillers e.g. DP 492-9343 MR 10:1 with DR 471, subsequently sand to effect with grain 150 until the tree-rings are clearly visible.

Apply the stain evenly by spraying with a cup gun, wipe by brush in direction of the structure until the stain is almost dry.

Optional: Application by stain brush with surplus, subsequently wipe by brush in direction of the structure until the stain is almost dry.

Important advices

After wiping, the stain must not look wet, only slightly moist. Irregular wiping leads to colour tone differences. The effect is decisively influenced by the quality and structure of the raw wood, as well as by the application quantities and the sanding of the base coat. Always make a test staining with finish under practice conditions!

All WR stains and can be mixed with each other. Shading with Hesse colour concentrates of the series BP-(colour tone).

Stir or shake the concentrates well before use!

Storage: Protect from frost.

Order information

Order No.: **WR 1.... (colour tone)**

Standard colours

Dark terracotta: **WR 1001**

Frisian blue: **WR 1002**

Frisian green: **WR 1003**

Light terracotta: **WR 1004**

Anthracite: **WR 1005**

Grey-beige: **WR 1006**

Packaging sizes: 1/5/10/25 litres

Thinner: Water

Efficiency per litre: 6-10 m²

Recoatable preferably with Hesse Natural Wood effect DA 400-1, but also with other lightfast Hesse PUR Multicoat and Top coats, e.g. DE 55., or Hydro Multicoat lacquers e.g. HE 60.

Hesse Antique stain

Two-stage, light-fast Hydro-stain system for antique effects on porous or structured wood

Fields of application

For furniture manufacturing and in the interior sector.

Processing

Carrier: pine, knotty pine, knotty spruce, if applicable also oak as solid wood or veneer of at least 0,7 mm, better 1 mm thickness

Pre-treatment: Produce a deep structure on the raw wood with a plastic sanding brush.

Clean from dust.

Apply the Pre-stain 1-2 x wet without wiping off (on oak, maybe with slight wiping)

Drying for at least 3 hours at RT 20°C; grind by sanding pad with grain 150 until the tree-rings are clearly visible,

Following staining: apply the After-stain 1 - 2 x wet by spraying, depending on the desired effect, with or without wiping off

Drying for at least 3 hours at RT 20°C

Important advices

All WAV and WA stains can be mixed with each other.

Shading with Hesse colour concentrates of the series BP-(colour tone).

Stir or shake the concentrates well before use!

Storage: Protect from frost.

Always make a test staining with finish under practice conditions!

Order information

Order No.:

Antique pre-stain

white: **WAV 58-20500**

gold: **WAV 5-22507**

Special colours on demand

Antique after-stain

for oak: **WA 5- (colour tone)**

Antique after-stain

for conifers: **WA 58- (colour tone)**

Packaging sizes: 1/5/10/25 litres

Thinner: Water

Efficiency per litre: 5-8 m²

Recoatable preferably with Hesse Natural Wood effect DA 400-1.

Hesse Hydro Wiping stain

Ready-for-use, water-dilutable pigment paste for emphasising the wood pores in contrasting colours.

Fields of application

For open-pore wood like oak or ash, both for stained wood surfaces and for open-pore colour lacquer surfaces.

Processing hints

Base coating:

- 2 x thin application of Hesse-CN or PUR-Multicoat lacquers.
- Drying 12-16 hours at 20°C
- Apply the wiping stain by brush or bale. Remove the surplus with a clean, lint-free bale. After 60 min of drying grind the surface with steel wool thoroughly so that the material remains in the pores only. A possible haze remaining on the surface can be removed by regrinding. Afterwards, dedust carefully
- Spray application after dilution with water possible.

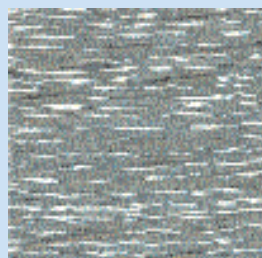
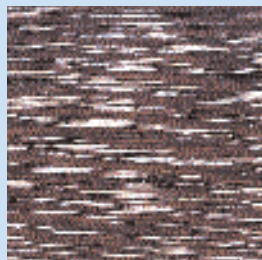
Order information

Order No.:

white **TW 130-9343**
Shading with BP 30.. possible

Packaging sizes: 1/5/10 kg

Subsequent treatment: Only with solvent-based lacquer systems like Hesse CN- and PUR-lacquers.



Hesse colour concentrates

Colour concentrates for Hesse-Hydro-stains – based on dye-stuffs like Hesse Precious wood stains (cherry tree stain, mahogany stain), positive stain and gloss stain

| | |
|-----------------|----------------|
| yellow | BF 1010 |
| green | BF 1060 |
| red | BF 1030 |
| black | BF 1290 |
| brown | BF 1080 |
| Packaging size: | 0.75 litres |

Colour concentrates for Hesse-Hydro-stains based on pigments, like colour stain, priming stain and for Hesse Hydro lacquers.

| | |
|-----------------|-------------------|
| white | BP 3570 |
| yellow | BP 3011 |
| green | BP 3061 |
| blue | BP 3051 |
| red | BP 3031 |
| black | BP 3091 |
| blue-red | BP 3034 |
| mahogany red | BP 3038-25 |
| purple | BP 3040-25 |
| Packaging size: | 0.75 litres |

Colour concentrates for Hesse lacquer stains like Rustic- and Spray stains.

| | |
|-------------------|------------------------|
| Pigment yellow | CP 7010 |
| Pigment ochre | CP 7610 |
| Pigment orange | CP 7020 |
| Pigment red | CP 7030 |
| Pigment oxide red | CP 7630 |
| Pigment green | CP 7560 |
| Pigment blue | CP 7050 |
| Pigment redbrown | CP 7080 |
| Pigment black | CP 7090/CP 7590 |
| Pigment white | CP 7670 |
| Dyestuff yellow | CF 5010 |
| Dyestuff orange | CF 5020 |
| Dyestuff red | CF 5030 |
| Dyestuff green | CF 5062 |
| Dyestuff blue | CF 5050 |
| Dyestuff brown | CF 5380 |
| Dyestuff black | CF 5090 |
| Packaging size: | 1 litre |

Hesse Rustic stain

Outstanding light-fast, fast drying, ready-for-use solvent stain with excellent wetting power. No roughening of the wood – thus lower sanding and lacquering effort in comparison with waterborne stain systems.

Fields of application

For pore emphasized rustic effects, especially adjusted on oak. Also for other kinds of porous hard wood like ash, mahogany, walnut etc.

Processing hints

Stir or shake well!

Spray application: apply a good amount of stain. After short reaction time remove the surplus with a gauze ball first across, then along the wood grain.

Application by brush: apply a good amount of stain by brush. After short reaction time remove the surplus with a gauze ball first across, then along the wood grain. Dipping possible.

Important advices

For production of intermediate colour tones Hesse rustic stains can be mixed with each other. Shading with Hesse colour concentrates of the series CF ... and CP

Brightening with CB 84-0700, addition up to 20% possible. For finely pored wood, we recommend Hesse Spray stain e.g. CL 18-.... Application without wiping off

Order information

Order No.:

Oak **CL 5- ... colour tone**

Mahogany **CL 15- ... colour tone**

Other kinds of wood **CL .. - ... colour tone**

Packaging sizes: 1/5/10/25 litres

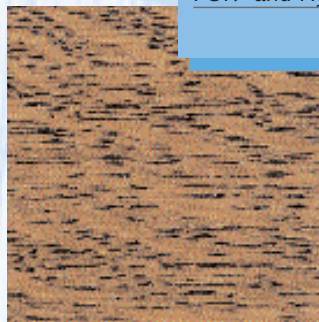
Efficiency per litre: 8 – 10 m²

Special colours: on demand also for other kinds of wood (e.g. ramin)

Thinner: **CV 553**

Packaging sizes thinner: 1/5 litres

Subsequent treatment with many Hesse CN-, PUR- and Hydro lacquers.



Hesse colour concentrates for transparent lacquers

Special ready for use, lightfast dyestuffs and pigments in solvents.

Fields of application

By coloration of solvent-based lacquers, brilliant translucent colour tones can be produced. Alternatively for antique treatment of furniture by shading/patinating and for equalizing of colour differences.

Processing

- If used as glaze lacquer: add 2 – 4 % concentrate to the chosen clear nitrocellulose- or polyurethane-lacquer and spray evenly on the primed and sanded carrier.
- If used as patina: Apply colour concentrate by patinating technique after sanding of the last base coat. Spray distance and patinating technique with wide jet or circular section jet are a matter of experience.
- Subsequently finish with solvent lacquer systems in the desired degree of gloss.

Important hints

The application quantity of Hesse colour concentrates for translucent lacquers varies according to the desired effect. Always stir or shake well before processing.

The concentrates are mixable with each other in any ratio.

Hesse colour fan for transparent lacquers

This colour fan will easily give you the chance to choose your own desired colour tone. By putting the foils on surfaces, which are pre-treated with Hesse base coat, you will get a reasonably true picture of the following coating. If you combine different foils you will get an even larger choice. The colour fan is excellently suitable for the shading of colourless nitrocellulose- or polyurethane lacquer systems.

Order information

Order no.:

Hesse fan for translucent lacquers: **XLF**



Order information

Order no.

| | |
|-----------------|---------|
| yellow | ZD 1-01 |
| red | ZD 1-03 |
| purple | ZD 1-04 |
| blue | ZD 1-05 |
| green | ZD 1-06 |
| black | ZD 1-08 |
| white | ZD 1-09 |
| Mahogany light | ZD 1-11 |
| Mahogany dark | ZD 1-12 |
| Cinnamon | ZD 1-13 |
| Hazelnut | ZD 1-14 |
| Beech | ZD 1-15 |
| Pine | ZD 1-16 |
| Cherry | ZD 1-17 |
| Macoree | ZD 1-18 |
| Honey | ZD 1-19 |
| Walnut | ZD 1-20 |
| Walnut light | ZD 1-21 |
| Rose wood | ZD 1-22 |
| Alder | ZD 1-23 |
| Packaging size: | 1 litre |

Hesse Bleaching agent

Bleaching agent based on hydrogen peroxide, specially stabilized; with extra strong bleaching effect. Addition of activator required!

Fields of application

For brightening of natural wood like walnut, cherry tree, ash, beech, maple etc.

Processing

Application by plastic sponge or brush with plastic bristles only directly on the wood. Apply mixture fully, remove surplus with squeezed sponge. Attention: Wear prescribed protective clothing!

Mixture with activator: 50 g Hesse Bleaching activator HWB 202 (powdery) per litre of bleaching agent.

Underdosing of the activator or use of another type of activator may result in surface faults.

Pot life of the mixture: several hours.

Due to the strong roughening of the wood caused by the bleaching process, the wood should be slightly sanded e.g. by sanding sponge, grain 150.

Important advices

Please absolutely observe the specified drying time of 48 h, respectively for critical kinds of wood or solid wood: 72 h Sufficient air exchange must be ensured!

Non-compliance may lead to disturbances in the following surface construction. Please also pay attention to our separate technical information sheet "Wood pre-treatment - bleaching"

Order information

| | |
|-----------------------|---|
| Order no.: | |
| Bleaching agent | HWW 224 |
| Packaging sizes: | 1/5/10 litres |
| Activator: | HWB 202 powdery |
| Packaging sizes: | 0,5/1 kg |
| Thinner: | Water |
| Efficiency per litre: | 8 - 12 m ² |
| Subsequent treatment: | with suitable Hesse PUR-Base coats and PUR Multicoat lacquers e.g. DG 417, DG 534, DE 55., DE 56., DA 400-1 and with CN-lacquers. |

Hesse Ammonia solution

Classical fumigating procedure.

Fields of application

For fumigating of oak.

Processing

This special procedure works by the reaction of the ammonia vapours with the tannin of the wood („fumigating“). Do not spray or brush!

Important advices

Product is corrosive and strongly irritates skin and air passages. Consider safety data sheet categorically. Please see also our separate technical information sheet "Fumigating of oak"

Order information

| | |
|------------------|---|
| Order no.: | |
| Ammonia solution | HBV 241 |
| Packaging sizes: | 1/5/10 litres |
| Final treatment: | with CN, PUR and Hydro lacquers except for acid curing systems. |



Hesse Leaching stain for oak

Chemical stain on special Alkaline basis for production of the classical leaching effect on solid oak. Reacts with the tannin contained in the oak wood without own colouring features. Only for best European white oak.

Fields of application

Decorative design of wooden surfaces in the field of furniture- or interior completion of living- and bedroom furniture. Not applicable for the treatment of walkable surfaces and for kitchen furniture.

Processing

Fully apply the material by plastic sponge or plastic brush. Reaction time at least 15, better up to 60 min. During the reaction time, the material must not start drying, if required, apply again.

Subsequently wash surplus off with a high-pressure cleaner, until the water becomes clear. Blow off or dry rest water, especially in corners. Drying at least for 24 hours.

Important advices

Consider the generally known advices regarding the leaching of oak wood categorically. The leaching stains only activate the ingredients of the oak wood and have no further influence on the developed staining picture/colour tone. Please also see our separate technical information "Classical leaching procedure of solid oak".

Order information

Order no.:

Leaching stain

Classical rustic

HWD 204

Leaching stain

HWD 211 without subsequent washing, mild leaching, also applicable on oak veneer

Packaging sizes:

1/5/10 litres

Thinner:

Water

Subsequent treatment with Hesse-PUR-Lacquers or PUR-Brighteners with lightfast hardener.

Hesse Leaching stain for soft wood

This accentuated positive effect on conifers can be only produced by chemical treatment with pre- and after stain. As carrier, solid Nordic pine, but also spruce is preferably applicable.

Fields of application

Decorative design of wooden surfaces in the field of living- and bedroom furniture.

Processing

Hesse-Softwood Pre-stain BH 59-21490 –

Mixing ratio 1 part stain + 10 parts water.

Fully apply with a plastic sponge, let react shortly, then remove stain surplus with a plastic sponge.

Alternatively apply evenly damp by cup gun 1,5 mm nozzle, 2 bar spray pressure, reduced stain feed. Possibly wipe off slightly.

Application by dipping possible. For this, dip the object into the stain for 5-10 sec., take out and let drip. Wipe drops by a plastic sponge. Drying time 3-6 h.

Hesse-Softwood After-stain BI 59-21491 Mixing ratio 1 part stain + 10 parts water, apply like pre-stain. Drying time 12-16 h.

Important hints

The colour- and effect development of the stain is mainly influenced by the used wood quality. Pine wood results in more brownish, whereas spruce wood results in more greenish colour tones. Please also see our separate technical information "Leaching of soft wood".

Order hints

Order no.:

Hesse-Softwood

Pre-stain

BH 59-21490

Hesse-Softwood

After-stain

BI 59-21491

Packaging sizes:

1/5/10 litres

Thinner:

Water

Subsequent treatment with Hesse-PUR-Lacquers or PUR-Brighteners with lightfast hardener.

