

Step into our World



Parquet Finish Solutions

Hesse  **Lignal**
COATINGS

HESSE LIGNAL

Natural Living

Wood is a natural product and the most environmentally friendly raw material and building material, which is available to us. Wood has become indispensable for completion of interiors because wooden floors offer all the features one could wish for: they are noise and heat insulating, hygienic, pollutant-absorbent, warm underfoot and resilient. With wood one feels comfortable. Wood can be customised easily within your own four walls, and therefore influences your well-being.

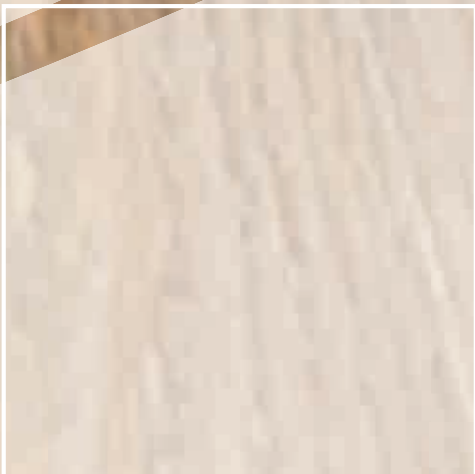
Wooden floors are natural air conditioners, because wood absorbs pollutants from indoor air and has a positive effect on the indoor climate and thus on your health and well-being. Wood has favourable thermal characteristics. Even at relatively low surface temperature, the surface of the wood is still cosy. Dust and dirt do not stand a chance on wooden floors. The floors are easy to clean and can be kept hygienic for years. Another advantage of wooden floors: they are non-static. After years of use and much stress and strain, wooden floors can easily be renovated to look like new again.



Parquet individual and exclusive

The sheer diversity of wood types available, their colour and texture variations make every floor unique. Elegant, sensual and individual comes to mind when characterising such an object, and one that enhances all areas of life. Whether in the living room or nursery, the kitchen or office, public buildings or restaurants - wood is all the rage.

It is as versatile as it is beautiful: Whether traditional, natural, ecological, contemporary or modern, a wooden floor can be classic Oak and Beech, to Walnut or exotic Mahogany. Individuality is the key when choosing the type of wood and coating system required to bring your dream floor to life.



Hesse GmbH & Co. KG

Since being founded in 1910 it has been our objective to be the ideal partner to the woodcraft industry.

Over a hundred years of know-how and experience is at our disposal. As a result, our forward thinking and innovative company has risen with an extensive range of lacquers and stains, dedicated to the needs of carpenters and joiners. Thus, Hesse offers one of the largest and highest quality product ranges in the industry. Hesse products are manufactured according to the latest recipes and combine superior quality with easy and reliable processing. In addition the desires and needs of our customers are very important to us. None more-so than environmental protection.

Water-based lacquers, our Proterra range and the continuous review of all popular lacquer systems show that we as a company are committed to the reduction of solvents. We work hard to make sure our company displays the lowest possible ecological impact, and therefore a significant contribution to environmental protection.

You also benefit from the latest developments in the furniture industry, which are quickly transferred to the craft market.

In addition to our balanced product range, we offer an extensive consultancy and current information service. Whether it is our stain collection chart or Hesse Lacktuell - exchange of information is important, so that you, together with ourselves, are always up-to-date on key technical issues.

Talk to us!



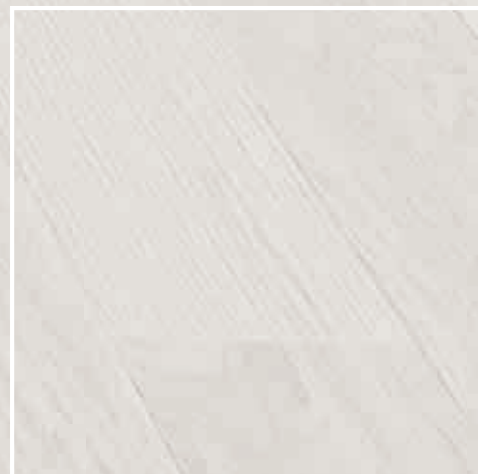


Modern, highly specialized production facilities, coupled with intelligent process control are the defining principles of our production. We guarantee that our products maintain the maximum level of consistency through constant scrutiny at every stage of manufacturing. We focus on the needs and desires of our customers, and to this end we operate one of the largest research and development laboratories in Europe. Born out of this a comprehensive and complete program has emerged for each area of the wood finishing industry. Whether staining, lacquering, restoring or maintaining - each area is covered by a comprehensive range of products that show the extraordinary possibilities and creative solutions that are possible with Hesse products. This guarantees that you will always get top quality products, at a reasonable price, at Hesse.

Service is a special priority to us. This includes collaborating with our very efficient authorised dealers, who not only sell our products, but as industry professionals stand ready to offer first class advice and practical help.

Our delivery centres are supplied reliably, quickly and punctually, but also receive comprehensive support whenever they need it. We conduct training programs for dealers, trade employees and timber merchants/processors; topics include product trends, knowhow, processing and handling of equipment.

We can also gladly provide on-the-ground assistance, ensuring your vision and piece of mind remain on track whatever the project. Hesse's famous Lacktuell newsletter also offers an insider look at current industry developments, beautifully complementing the Hesse catalogue and stain chart collection. This dedication and attention to detail come together to make Hesse-Lignal the number one choice for first-rate lacquers and stains.





HESSE PARQUET RANGE, PRODUCT OVERVIEW

WOOD-FILL	HS 11	page 8-9	5 l	Gap-filling solution, for mixing with sanding dust for flexible joint filler
PRIMER	HG 21	page 10	5 l	Hydro-primer for parquet and wooden floors with a tendency to side glueing and blocking, brightening.
PRIMER PLUS	HG 22	page 11	5 l	Hydro-Primer for parquet and wooden floors with a tendency to side and block bonding, with good wood grain enhancement
PRIMER ULTRA	HG 24	page 12-13	5 l	Hydro-primer, brilliant drying, particularly transparent, ready to use fast drying for parquet and wooden floors with a tendency to side glueing and blocking for the prevention of discoloration on wood containing tannic acid such as oak.
UNA-Elite	HE 31-2 mat HE 31-4 semi mat HE 31-7 satin gloss	page 14-15	5 l	1C-Hydro-Acrylate lacquer for parquet and wooden floors with normal to medium stress
PURA-ONE MV 10 : 1 HDR 71	HDE 51-2 mat HDE 51-4 semi gloss HDE 51-7 satin gloss	page 16-17	4.5 l	2C-Hydro-Acrylate-PUR-lacquer for parquet and floors exposed to highest stress
PURA-NATURA MV 10 : 1 HDR 72	HDE 52-0	page 18-19	4.5 l	2C-Hydro-Acrylate-PUR-Natural effect, dull mat for bright parquet and wooden floors, also with higher stress.
RESIN-OIL MV optional 10 : 1 OR 87	OE 82-4 semi gloss OE 82-7 satin gloss	page 20-21	2.5 l	Parquet oil - for brushing and rolling for parquet and wooden floors. Durability and abrasion resistance depend on the amount of material applied.
NATURAL-OIL MV optional 10 : 1 OR 87	OE 83-2 mat OE 83-9 glossy	page 22-23	2.5 l	Parquet oil -Natural look to pad in for parquet and wooden floors, as well as OSB-boards and cork. Durability and abrasion resistance depend on the number of oil layers.
NATURAL-SOLID- OIL MV optional 100 : 4 OR 88	GE 11254	page 24-25	1 l 2.5 l 25 l	Oil based on linseed oil, free from cobalt and lead containing siccativ, low odour, low solvent with good grain enhancement of the wood and excellent chemical resistance.
PARQUET COLOUR Parquet stain	WPB	page 28-29	5 l	Special stain in many attractive colours for staining parquet with subsequent sealing, high light resistance.
NATURAL-COLOUR-OIL MV optional 10 : 1 OR 87	OB 83-	page 30-31	2.5 l	Tinted parquet oil in many attractive colours, to pad in for parquet and wooden floors, as well as OSB-boards and cork. Durability and abrasion resistance depend on the number of oil layers.
PRIMER WHITE-OIL MV 10 : 1 OR 87	OB 84-77	page 32	2.5 l	Tinted parquet oil for priming under 2C-Hydro sealing (e.g. PURA-NATURA)
Additive, slide-blocking	HZ 75	page 33	1 l	Additive to increase slip-resistance according to BGR 181 (DIN 51130)



spatula



coat with applicator



quick-drying



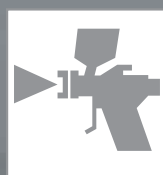
paint brush/
bristle brush



pad in



mixing ratio



spray



roller coating



wipe with slightly
damp cloth



apply with cotton cloth

HESSE PARQUET RANGE, PRODUCT OVERVIEW

HERKULITE	HUE 86063 mat HUE 86064 semi mat HUE 86068 brilliant	page 36-37	5 l 25 l	Water-dilutable, UV- hardener parquet sealing lacquer for technical processes on site; solvent free, colourless ready to use, extremely scratch and abrasion resistant.
PROTECT-OIL MV optional 10 : 1 OR 87	OE 88-2	page 38-39	1 l	Parquet oil for maintenance and repair of oiled floors.
PROTECT- CLEANER	PR 90	page 40	1 l	Cleaning and maintenance product for parquet.
INTENSIVE-CLEANER	PR 91	page 41	1 l	Intensive cleaner for parquet.
BROWN SOAP	GR 1902	page 42-43	1 l 5 l	Solvent-free biodegradable soap solution for surface treatment, cleaning and care of dark soaped parquet and wooden floors or furniture surfaces. Extremely low odour and water-dilutable.
WHITE SOAP	GR 1900-0700	page 44-45	1 l 5 l	Solvent-free biodegradable cleaning solution for surface treatment, cleaning and care for light parquet and wooden floors or furniture surfaces, extremely low odour, pigmented and water-dilutable.
REMOVER	OS 5600	page 46	1 l 25 l	Water-based, highly effective undiluted cleaning agent to remove old recoats.
AQUA-REFRESHER	OE 5670	page 47	1 l 25 l	Environmentally friendly care product for heavily used surfaces which are finished with Hesse parquet hydro sealer, UV-oil, oil-UV and oxy oil systems.
AQUA-REFRESHER mat	OE 5670-0001	page 48	1 l 25 l	Environmentally friendly care product for heavily used surfaces which are finished with Hesse parquet hydro sealer, UV-oil, oil-UV and oxy oil systems.
SOLVENT-WOOD- FILL	NS 15	page 52	5 x 5 l	Solvent-based joint filler which, after mixing with sanding dust, results in a high quality flexible and well filling joint filler.
Special Primer	ZD 4540	page 53	5 x 5 l	Single component special primer, free or aromatic, compounds, particularly transparent, brilliant when dry, colourless, with very good bond on delicate surfaces. Primer for parquet and wooden floors.
SOLID-PUR	DE 41-4 semi mat	page 54-55	5 l	1C-PUR-Lacquer, which hardens by reaction to humidity to form an extremely durable protective film; for renovation of parquet and wooden floors exposed to very high stresses.
PUR-Multicoat lacquer MV 10 :1 DR 4071	DE 45324 semi mat DE 45327 silky gloss	page 56-57	5 l 25 l	2C-PUR-Acrylic resin lacquer, light-fast, strong-filling, colourless. Multicoat lacquer for priming and top coating with high wear resistance, especially against mechanical stress. Product can be applied on bleached wood.

Hesse WOOD-FILL HS 11

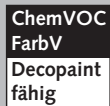


Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

Gap-filling solution based on dispersion which results, after mixing it with sanding dust, in a high-quality, elastic and well-filling gapfiller.



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds



Product fulfills the specifications of the Directive on Dyes and Lacquers containing solvents: ChemVOCFarbV- from 23.12.2004

Fields of application

for parquet and wooden floors for filling parquet gaps up to 3 mm wide and filling smaller imperfections.

Handling guidelines

Manually putty once or twice with 50 - 80 g/m² on professionally laid wood flooring. The floor must be sanded thoroughly down to the wood, dry and free from oil, fat, wax, silicones and sanding dust.

Ground treatment: Final sanding of wood floor with grain size 100/ dust removal.

Shake Hesse WOOD-FILL well before processing. Add very fine wooden sanding powder (grain 80) until the mass is pasty and can be applied with a putty knife. The sanding powder of the edges is working best. The finer the sanding powder, the better is the bonding in the gaps. Intermediate sanding roll sanding machine grain size 100 - 120, single disk sander grain size 120 - 150.

No gap putty residues must remain on the surface (danger of spot formation).

Drying

With good ventilation and max. humidity of 60% Sandability: after 30 - 60 min 20 °C for 1mm gaps, for 2mm gaps drying over night. Subsequent treatment with all products from the Hesse parquet range (PUR-, Hydro lacquers and oils).

Application example

- Mosaic-style parquet, oak with flaws
- Wood-sanding - grain size 100
- Mixing: Hesse WOOD-FILL with clean oak-sanding dust, grain 100
- Puttying: 1 x on the entire surface Hesse WOOD-FILL Mixture with clean oak-sanding dust, grain 100
- Intermediate drying 30 - 60 min 20 °C
- Plane sanding grain size 100 - 150 except for the raw wood
- Coating 2 - 3 x 100 - 120 g/m² Hesse UNA-ELITE with a suitable roller
- Intermediate drying each for at least 2 - 3 h 20 °C better over night
- Intermediate sanding each grain size 100 - 120
- Accessible after drying for at least 8 h 20 °C
- Full load capacity after 10 d 20 °C

Technical data

Delivery Condition:	Liquid
Shade:	whitish
Supply viscosity:	30 - 40 s / DIN 4 mm/20 °C
Non-volatile components:	17,5 - 18 %
Density:	1,014 kg/l at 20 °C
Storage stability:	1 year in the closed original container
Storage temperature:	10 - 30 °C
Please note actual Safety Data Sheet!	

Application method

Manual puttying:

With stainless-steel putty knife (the contact with oxidating metals lead to discolouration of the material and the puttied surfaces). Putty the complete parquet surface to be treated; pre-fill wide gaps or putty twice. Clean tools with water. Dried lacquer residue can be removed with Hesse CLEANING-AGENT DV 49.

Too doughy sanding powder paste can be diluted with Hesse WOOD-FILL, if required. Do not use water!

Special advice

Do not transfer material to metal containers!

To minimise the risk of side glueing, critical substrates such as i.e., wooden pavement, upright ribs, planed floor boards, parquet on underfloor heatings etc. require a proper pre-treatment with HG 21, HG 22.

General guidelines for handling

Of Hydro materials:

The wood moisture should lie between 8-12%. Please do not process and dry HYDRO lacquers at RT below 18 °C. The ideal humidity level for application lies between 55-65%. A too-low level of humidity during the lacquering process leads to shrink cracks; a too-high level delays the drying process. Water-soluble wood ingredients such as those from ash and tannic acids from woods like e.g. oak may cause colour changes and discolorations in the coating.

Therefore, as a rule, we recommend to make a test coating to evaluate the colour effect, adhesion and the drying process under practical conditions.

Hesse WOOD-FILL HS 11



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

Ordering hints

Order no.:	HS 11
Container sizes	5 l
Productivity per litre	10 - 20 m ²
Thinner	HS 11
Hesse	DV 9
CLEANING-AGENT	for removing dried lacquer residues
Giscode:	W2+

General advice/exclusion

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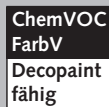
Hesse PRIMER HG 21



One-component HYDRO Base coat, brightening, fast drying for light wood, for parquet and wooden floors with tendency to side-glueing and blocking. Emission-tested building product according to DIBT-rules (German Institute for constructional engineering) associated with Hesse Hydro lacquers.



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds
nMP



Product fulfills the specifications of the Directive on Dyes and Lacquers containing solvents: ChemVOCFarbV- from 23.12.2004 (Decopaint guideline)



Emission-tested building product according to DIBT-rules (German Institute for constructional engineering) associated with Hesse Hydro lacquers.

Z-157.10-61 General technical approval - surface coating for parquets and wooden floors

Fields of application

e.g. under Hesse PURA-NATURA, in order to prevent the risk of side glueing on wooden pavings, upright blades, planed floor boards and parquet on underfloor heatings.

Handling guidelines

Non-recurring application with 100 -120 g/m² on professionally laid wood flooring. The floor must be sanded thoroughly down to the wood, dry and free from oil, fat, wax, silicones and sanding dust. Ground treatment: Final sanding of wood floor with grain size 100 - 120/ dust removal. Fill gaps properly with Hesse WOOD-Fill; see respective Technical Data Sheet.

Drying

Good ventilation necessary.
Initial drying: 15 min 20 °C
at a relative humidity of 65 %. Recoatable: without intermediate sanding after 100 - 120 min 20 °C
with Hesse HYDRO parquet lacquers especially with Hesse PURA-NATURA.

Application example

Planed timber floor boards, oak
- Wood-sanding - grain size 100
- Base coat 1 x 100 - 120 g/m²
Hesse PRIMER with a suitable roller
- Intermediate drying 100 - 120 min 20 °C
- Coating 2 x 100 - 120 g/m²
Hesse PURA-NATURA
- Intermediate drying for at least 2 - 3 h 20 °C
- Intermediate sanding grain size 120
- Intermediate sanding before the final lacquer coat with single disk sander and sanding grain size 120 - 150
- Accessible after drying for at least 8 h 20 °C
- Full load capacity after 10 d 20 °C

Technical data

Delivery Condition: Liquid
Shade: colourless
Supply viscosity: 16 - 20 s / DIN 4 mm/20 °C
Non-volatile components: 33 - 34 %
Density: 1,023 kg/l at 20 °C
Storage stability: 1 year in the closed original container
Storage temperature: 10 - 30 °C
Please note actual Safety Data Sheet!

Application method

Shake well before use!
Roll: with a suitable roller
Clean tools with water. Dried lacquer residue can be removed with Hesse CLEANING-AGENT DV 49.

General guidelines for handling

Of Hydro materials:
The wood moisture should lie between 8-12%. Please do not process and dry HYDRO lacquers at RT below 18 °C. The ideal humidity level for lacquering lies between 55-65%. Water-soluble wood ingredients such as those from ash and tannic acids from woods like e.g. oak may cause colour changes and discolorations in the coating. Therefore, as a rule, we recommend to make a test coating to evaluate the colour effect, adhesion and the drying process under practical conditions.

Ordering hints

Order no.:	HG 21
Container sizes	5 l
Productivity per litre	8 - 10 m ²
Hesse	DV 9
CLEANING-AGENT	for removing dried lacquer residues
Giscode:	W3+

General advice/exclusion

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Hesse PRIMER PLUS HG 22



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de



One-component HYDRO Base coat, fast drying for parquet and wooden floors with tendency to side-glueing and blocking. Emission-tested building product according to DIBT-rules (German Institute for constructional engineering) associated with Hesse Hydro lacquers.



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds nMP



Product fulfills the specifications of the Directive on Dyes and Lacquers containing solvents: ChemVOCFarbV- from 23.12.2004 (Decopaint guideline)



General technical approval - surface coating for parquets and wooden floors, permit no. Z-157.10-60 Z-157.10-61

Emission-tested building product according to DIBT-rules (German Institute for constructional engineering) associated with Hesse Hydro lacquers.

Fields of application

under Hesse parquet lacquers, to minimise the risk of side glueing of wooden pavings, upright blades, planed floor boards and parquet on underfloor heatings.

Handling guidelines

Non-recurring application with 100 -120 g/m² on professionally laid wood flooring. The floor must be sanded thoroughly down to the wood, dry and free from oil, fat, wax, silicones and sanding dust. Ground treatment: Final sanding of wood floor with grain size 100 - 120/ dust removal. Fill gaps properly with Hesse WOOD-Fill; see respective Technical Data Sheet.

Drying

Good ventilation necessary.
Initial drying: 15 min 20 °C
at a relative humidity of 65 %. Recoatable: without intermediate sanding after 100 - 120 min 20 °C
with Hesse HYDRO parquet lacquers

Application example

- Planed timber floor boards, oak
- Wood-sanding - grain size 100
 - Base coat 1 x 100 - 120 g/m²
Hesse PRIMER PLUS with a suitable roller
 - Intermediate drying 100 - 120 min 20 °C
 - Coating 2 x 100 - 120 g/m²
Hesse PURA-ONE
 - Intermediate drying for at least 2 - 3 h 20 °C
 - Intermediate sanding grain size 120
 - Intermediate sanding before the final lacquer coat with single disk sander and sanding grain size 120 - 150
 - Accessible after drying for at least 8 h 20 °C
 - Full load capacity after 10 d 20 °C

Technical data

Delivery Condition:	Liquid
Shade:	colourless
Supply viscosity:	14 - 15 s / DIN 4 mm/20 °C
Non-volatile components:	34 - 36 %
Density:	1,027 kg/l at 20 °C
Storage stability:	26 weeks in the closed original container
Storage temperature:	10 - 30 °C

Please note actual Safety Data Sheet!

Application method

Shake well before use!
Roll: with a suitable roller
Clean tools with water. Dried lacquer residue can be removed with Hesse CLEANING-AGENT DV 49.

Special advice

For woods with ingredients which interfere with handling/treatment (i.e., jatoba), we recommend pre-priming with OE 83-9 MV (10 : 1) with hardener OR 87, see Product Info OE 83-9.

General guidelines for handling

Of Hydro materials:
The wood moisture should lie between 8-12%. Please do not process and dry HYDRO lacquers at RT below 18 °C. The ideal humidity level for lacquering lies between 55-65%. Water-soluble wood ingredients such as those from ash and tannic acids from woods like e.g. oak may cause colour changes and discolorations in the coating. Therefore, as a rule, we recommend to make a test coating to evaluate the colour effect, adhesion and the drying process under practical conditions.

Ordering hints

Order no.:	HG 22
Container sizes	5 l
Productivity per litre	8 - 10 m ²
Hesse	DV 9
CLEANING-AGENT	for removing dried lacquer residues
Giscode:	W3+

General advice/exclusion

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Hesse Primer ULTRA HG 24



One-component HYDRO Base coat, brilliant-glossy drying, especially transparent, ready for use, fast drying for parquet and wooden floors with tendency to side-glueing and blocking for prevention of discolorations on tannin-containing timbers like e.g. oak.



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds nMP



Product fulfills the specifications of the Directive on Dyes and Lacquers containing solvents: ChemVOC FarbV- from 23.12.2004 (Decopaint guideline)



General technical approval
- surface coating for parquets and wooden floors applied for

Fields of application

under Hesse parquet lacquers, to minimise the risk of side glueing of wooden pavings, upright blades, planed floor boards and parquet on underfloor heatings. Preferred use under Hesse HERKULITE HUE 8606x(gloss degree) in order to reduce the side-bonding effect.

Handling guidelines

Non-recurring application with 80 -100 g/m² on professionally laid wood flooring.

The floor must be sanded thoroughly down to the wood, dry and free from oil, fat, wax, silicones and sanding dust.

Ground treatment: Final sanding of wood floor with grain size 100 - 120/ dust removal. Fill gaps properly with Hesse WOOD-Fill; see respective Technical Data Sheet.

Drying

Good ventilation necessary.

Initial drying: 15 min 20 °C

at a relative humidity of 65 %. Recoatable: without intermediate sanding after 100 - 120 min 20 °C with Hesse HYDRO parquet lacquers preferred under Hesse HERKULITE HUE 8606x(degree of gloss)!

Application example

Planed timber floor boards, oak semi mat

- Wood-sanding graduated with grain size 80 -120

- Base coat - 1 x 80 - 100 g/m²

Primer ULTRA HG 24 with a suitable roller

- Intermediate drying 100 - 120 min 20 °C

- Coating 2 x 100 - 120 g/m²

Hesse HERKULITE HUE 86064 see special Technical Data Sheet for Hesse HERKULITE HUE 8606x(gloss degree)!

- Intermediate drying appr. 2 h 20 °C

UV-curing: with suitable mobile UV-lamp unit

(e.g. Floormate by company DecoRad or comparable); 1 Hg-lamp 80W/cm; forward feed: ca. 7 m/min. Please follow the processing and handling instructions and wear the personal protective equipment!

- slight interim sanding grain size 120

- Accessible immediately after proper UV-curing.

- Full load capacity

Now the surface is ready and after short cooling time it can be burdened immediately.

Technical data

Delivery Condition: Liquid
Shade: colourless
Supply viscosity: 16 - 20 s / DIN 4 mm/20 °C

Non-volatile components: 21 %

Density: 1,0 kg/l at 20 °C

Storage stability: 1 year in the closed original container

Storage temperature: 10 - 30 °C

Please note actual Safety Data Sheet!

Application method

Shake well before use!

Roll: with a suitable roller

Clean tools with water. Dried lacquer residue can be removed with Hesse CLEANING-AGENT DV 49.

Special advice

For lumbers with disturbing ingredients (e.g. Jatoba) we recommend to use a hydro-primer, base coating with OE 83-9 mix ratio 10 : 1 with hardener OR 87, see Technical Data Sheet OE 83-9. A test sealing is necessary!

General guidelines for handling

Of Hydro materials:

The wood moisture should lie between 8-12%.

Please do not process and dry HYDRO lacquers at RT below 18 °C. The ideal humidity level for lacquering lies between 55-65%.

Water-soluble wood ingredients such as those from ash and tannic acids from woods like e.g. oak may cause colour changes and discolorations in the coating.

Therefore, as a rule, we recommend to make a test coating to evaluate the colour effect, adhesion and the drying process under practical conditions.

Ordering hints

Order no.: HG 24

Container sizes 5 / 25 l

Productivity per litre 8 - 10 m²

Hesse DV 9

CLEANING-AGENT for removing dried lacquer residues

Giscode: W3+

pH-value: 6 - 7

Hesse Primer ULTRA HG 24



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

General advice/exclusion

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Hesse UNA-ELITE HE 31 -x(degree of gloss)



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

One-component Hydro-acrylic lacquer, abrasion-resistant, viscoplastic, well filling, light-fast with very good stability and resistance to foot tracks and typical household chemicals. Multicoat lacquer for priming- and top coating. Product can be used on bleached wood. Emission-tested building product according to DIBT-rules (German Institute for constructional engineering).



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds nMP



Fulfills DIN EN 71-3:2002-11 (safety of children's toys) Product fulfills the specifications of the Directive on Dyes and Lacquers containing solvents: ChemVOC FarbV- from 23.12.2004 (Decopaint guideline)



Emission-tested building product according to DIBT-rules (German Institute for constructional engineering) associated with Hesse Hydro lacquers. permit no. Z-157.10-60 Emission-tested building product according to DIBT-rules (German Institute for constructional engineering).

Fields of application

In the living area for parquet and wooden floors for normal to medium wear.

Handling guidelines

Double-coat application with 100 -120 g/m² on professionally laid wood flooring. The floor must be sanded thoroughly down to the wood, dry and free from oil, fat, wax, silicones and sanding dust. Ground treatment: Final sanding of wood floor with grain size 100 - 120/ dust removal. Intermediate sanding grain size 120. The quality of the wood sanding is a decisive factor for the quality of the final surface.

Drying

Dependent on amount applied, temperature of lacquer and surroundings, humidity, application process and substrate material.

Sandable and recoatable: after 2 - 3 h 20 °C

Accessibility: after 8 h 20 °C

Full load capacity: after 10 d 20 °C

The parquet may not be covered with foils or carpets before having attained the final hardness. Recoatable:

following thorough sanding, possible with itself

Application example

parquet, oak

- Wood-sanding - grain size 100

- Coating 2 x 100 - 120 g/m²

Hesse UNA-ELITE with a suitable roller

- Intermediate drying for at least 2 - 3 h 20 °C

- Intermediate sanding grain size 120

- Intermediate sanding before the final lacquer

coat with single disk sander and sanding grain

size 120 - 150

- Accessible after drying for at least 8 h 20 °C

- Full load capacity after 10 d 20 °C

Gloss level

08-12 Gloss/125 µm mat

17-23 Gloss/125 µm semi mat

37-43 Gloss/125 µm silky gloss

DIN 67530 / 60°

application on photo

cardboard

Technical data

Delivery Condition: Liquid

Shade: colourless

Supply viscosity: 18 - 22 s / DIN 4 mm/20 °C

Non-volatile components: 38,5 - 40 % according to degree of gloss

Density: 1,035 - 1,042 kg/l at 20 °C

Storage stability: 1 year in the closed original container

Storage temperature: 10 - 30 °C

Please note actual Safety Data Sheet!

Application method

Shake well before use!

Spraying: possible

Roll:

Clean tools with water. Dried lacquer residue can be removed with Hesse

CLEANING-AGENT DV 49.

Special advice

To minimise the risk of side glueing, critical substrates such as i.e., wooden pavement, upright ribs, planed floor boards, parquet on underfloor heatings etc. require a proper pre-treatment with HG 22.

Parquet floors which have already been lacquered with solvent-containing systems should only be touched up with systems which contain solvents, to prevent the risk of spot formation!

General guidelines for handling

Of Hydro materials:

The wood moisture should lie between 8-12%.

Please do not process and dry HYDRO

lacquers at RT below 18°C. The ideal humidity

level for lacquering lies between 55-65%. To

avoid adhesion problems, please freshly sand

the lacquer surfaces before application and

whenever possible, immediately apply the top

coat to the sanded surfaces. Under certain

circumstances, timbers with a high wax content

(i.e. teak) have a negative influence on the

bonding. Application of top coat: on bleached

woods, only with 1C HYDRO lacquers and only

following an interim drying interval of at least 72

hours after bleaching. Water-soluble wood

ingredients such as those from ash and tannic

acids from woods like e.g. oak may cause

colour changes and discolorations in the

coating.

Hesse UNA-ELITE HE 31 -x(degree of gloss)



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de



DIN 68861, part, 1C
DIN 53160 Part 1 and Part
2 (resistance against saliva
and sweat simulation); No
discolouration (Level 5)
PVC-resistant

Therefore, as a rule, we recommend to make a test coating to evaluate the colour effect, adhesion and the drying process under practical conditions.

Guidelines for cleaning and care: Please note care instructions in accordance with DIN 18356. Clean the parquet slightly wettish, with soft cloth. Not wet! Use only neutral detergents without silicone, ammonium chloride and scrubbing agents. Regular cleaning and care with Hesse PROTECT-CLEANER PR 90 with Carnauba wax and Hesse INTENSIVE-CLEANER PR 91 increases the useful life of the finish.

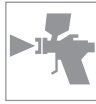
Ordering hints

mat	HE 31-2
semi mat	HE 31-4
silky gloss	HE 31-7
Container sizes	5 l
Productivity per litre	8 - 10 m ²
Hesse	DV 9
CLEANING-AGENT	for removing dried lacquer residues
Post-treatment/care products	PR 90, PR 91
Giscode:	W3+

General advice/exclusion

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Hesse PURA-ONE HDE 51 -x(degree of gloss)



Mixture ratio: 10 : 1 by volume with
Hesse PURA-Hardener HDR 71

Two-component, highly abrasion-resistant, viscoplastic, well filling, light-fast with very good stability and resistance to foot tracks and typical household chemicals Multicoat lacquer for priming- and top coating. Emission-tested building product according to DIBT-rules (German Institute for constructional engineering).



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds nMP



Fulfills DIN EN 71-3:2002-11 (safety of children's toys)
Product fulfills the specifications of the Directive on Dyes and Lacquers containing solvents: ChemVOC FarbV- from 23.12.2004 (Decopaint guideline)



DIN 51130, anti-slip properties, + 5 % ZD 2792, R 11
Testing no. 51091103.001

Einsatzgebiete

for parquet and wooden floors and OSB which are subject to the highest wear.

Handling guidelines

Double-coat application with 100 -120 g/m² on professionally laid wood flooring. The floor must be sanded thoroughly down to the wood, dry and free from oil, fat, wax, silicones and sanding dust. Ground treatment: Final sanding of wood floor with grain size 100 - 120/ dust removal. Intermediate sanding grain size 120/ dust removal. The quality of the wood sanding is a decisive factor for the quality of the final surface. Add the hardener to the original lacquer can and immediately shake for 1-2 minutes. Do not mix in the application container. Follow the exact mixing ratio also for partial quantities and shake the mixture well. Use mixture only within the specified processing time. Do not store ready-mixed material in a close can. Do not use any electric stirring devices; danger of foam and/or bubble formation!

Handling interval

2 - 3 h at 20 °C

Pot life

3 - 4 h at 20 °C

Drying

Dependent on amount applied, temperature of lacquer and surroundings, humidity, application process and substrate material
Sandable and recoatable: after 2 - 3 h 20 °C
Accessibility: after 8 h 20 °C
Full load capacity: after 10 d 20 °C
The parquet may not be covered with foils or carpets before having attained the final hardness.

Application example

parquet, oak

- Wood-sanding - grain size 100
- Coating 2 x 100 - 120 g/m²
Hesse PURA-ONE with a suitable roller
- Intermediate drying for at least 2 - 3 h 20 °C
- Intermediate sanding grain size 120
- Intermediate sanding before the final lacquer coat with single disk sander and sanding grain size 120 - 150
- Accessible after drying for at least 8 h 20 °C
- Full load capacity after 10 d 20 °C

Gloss level

8-12 Gloss/125 µm	mat
18-22 Gloss/125 µm	semi mat
37-43 Gloss/125 µm	silky gloss
	DIN 67530 / 60° application on photo cardboard

Technical data

Delivery Condition:	Liquid
Shade:	colourless
Supply viscosity:	18 - 22 s / DIN 4 mm/20 °C
Non-volatile components:	39 - 41 % after mixing
Density:	1,03 - 1,045 kg/l at 20 °C
Storage stability:	1 year in the closed original container
Storage temperature:	10 - 30 °C
Please note actual Safety Data Sheet!	

Application method

Shake well before use!
Spraying: possible
Addition of water required. Work in the hardener well, before adjustment of spray viscosity with up to 5% of water.
Roll:
Clean tools with water. Dried lacquer residue can be removed with Hesse CLEANING-AGENT DV 49.

Special advice

To minimise the risk of side glueing, critical substrates such as i.e., wooden pavement, upright ribs, planed floor boards, parquet on underfloor heatings etc. require a proper pre-treatment with HG 22.
Parquet floors which have already been lacquered with solvent-containing systems should only be touched up with systems which contain solvents, to prevent the risk of spot formation!

Hesse PURA-ONE HDE 51 -x(degree of gloss)

Mixture ratio: 10 : 1 by volume with Hesse PURA-Hardener HDR 71



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de



Emission-tested building product according to DIBT-rules (German Institute for constructional engineering). permit no. Z-157.10-61
General technical approval - surface coating for parquets and wooden floors



DIN 68861, part, 1B
DIN 53160 Part 1 and Part 2 (resistance against saliva and sweat simulation); No discolouration (Level 5)
PVC-resistant

General guidelines for handling

Of Hydro materials:

The wood moisture should lie between 8-12%. Please do not process and dry HYDRO lacquers at RT below 18 °C. The ideal humidity level for lacquering lies between 55-65%. To avoid adhesion problems, please freshly sand the lacquer surfaces before application and whenever possible, immediately apply the top coat to the sanded surfaces. Under certain circumstances, timbers with a high wax content (i.e. teak) have a negative influence on the bonding. Water-soluble wood ingredients such as those from ash and tannic acids from woods like e.g. oak may cause colour changes and discolorations in the coating.

Therefore, as a rule, we recommend to make a test coating to evaluate the colour effect, adhesion and the drying process under practical conditions. Guidelines for cleaning and care: Please note care instructions in accordance with DIN 18356. Clean the parquet slightly wettish, with soft cloth. Not wet! Use only neutral detergents without silicone, ammonium chloride and scrubbing agents. Regular cleaning and care with Hesse PROTECT-CLEANER PR 90 with Carnauba wax and Hesse INTENSIVE-CLEANER PR 91 increases the useful life of the finish.

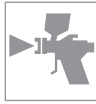
Ordering hints

mat	HDE 51-2
semi mat	HDE 51-4
silky gloss	HDE 51-7
Container sizes	4,5 l
Hardener	HDR 71
Container sizes, hardener	0,45 l
Productivity per litre	8 - 10 m ²
Thinner	H2O max. 5 % only for spray application
Hesse CLEANING-AGENT	DV 9 for removing dried lacquer residues
Post-treatment/care products	
Giscode:	W3/DD+

General advice/exclusion

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Hesse PURA-NATURA HDE 52-0



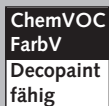
Mixture ratio: 10 : 1 by volume with Hesse
PURA-NATURA-hardener HDR 72



Two-component, abrasion-resistant, viscoplastic, brightening, dull mat, light-fast with very good stability and resistance to foot tracks and typical household chemicals The natural impression of the wood remains unchanged. Multicoat lacquer for priming- and top coating for light wood. Emission-tested building product according to DIBT-rules (German Institute for constructional engineering).



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds nMP
Fulfills DIN EN 71-3:2002-11 (safety of children's toys)



Product fulfills the specifications of the Directive on Dyes and Lacquers containing solvents: ChemVOCFarbV- from 23.12.2004 (Decopaint guideline)



Emission-tested building product according to DIBT-rules (German Institute for constructional engineering). permit no. Z-157.10-61
Emission-tested building product according to DIBT-rules (German Institute for constructional engineering).

Fields of application

In the living area, also for heavy loaded parquet and wooden floors.

Handling guidelines

Double-coat application with 100 -120 g/m² on properly prepared substrates The floor must be sanded thoroughly down to the wood, dry and free from oil, fat, wax, silicones and sanding dust. Ground treatment: of professionally laid wood flooring. Final sanding of wood floor with grain size 100 - 120/ dust removal. Intermediate sanding grain size 120 - 150/ dust removal. The quality of the wood sanding is a decisive factor for the quality of the final surface. Add the hardener to the original lacquer can and immediately shake for 1-2 minutes. Do not mix in the application container. Follow the exact mixing ratio also for partial quantities and shake the mixture well. Use mixture only within the specified processing time. Do not store ready-mixed material in a close can. Do not use any electric stirring devices; danger of foam and/or bubble formation!

Handling interval

2- 3 h at 20 °C

Pot life

3 - 4 h at 20 °C

Drying

Dependent on amount applied, temperature of lacquer and surroundings, humidity, application process and substrate material Sandable and recoatable: after 2 - 3 h 20 °C at a relative humidity of 65 %. Accessibility: after 8 h 20 °C Complete hardening after 10 d 20 °C
The parquet may not be covered with foils or carpets before having attained the final hardness.

Application example

parquet, oak

- Wood-sanding - grain size 100
- Coating 2 x 100 - 120 g/m²
Hesse PURA-NATURA with a suitable roller
- Intermediate drying for at least 2 - 3 h 20 °C
- Intermediate sanding grain size 120
- Intermediate sanding before the final lacquer coat with single disk sander and sanding grain size 120
- Accessible after drying for at least 8 h 20 °C
- Full load capacity after 10 d 20 °C

Gloss level

2-4 Gloss/125 µm
dull mat
DIN 67530 / 60°
application on photo cardboard

Technical data

Delivery Condition: Liquid
Shade: colourless
Supply viscosity: 30 - 40 s / DIN EN ISO 2431 - 4 mm
Non-volatile components: 34 - 35 % after mixing
Density: 1,02 - 1,03 kg/l at 20 °C
Storage stability: 1 year in the closed original container
Storage temperature: 10 - 30 °C
Please note actual Safety Data Sheet!

Application method

Shake well before use!
Spraying: possible
Addition of water required. Work in the hardener well, before adjustment of spray viscosity with up to 5% of water.
Roll:
Clean tools with water. Dried lacquer residue can be removed with Hesse CLEANING-AGENT DV 49.

Special advice

On dark woods or stains greying may occur due to the slightly milky self-colour of the material. To minimise the risk of side glueing, critical substrates such as i.e., wooden pavement, upright ribs, planed floor boards, parquet on underfloor heatings etc. require a proper pre-treatment with HG 21.

Hesse PURA-NATURA HDE 52-0

Mischungsverhältnis: 10 : 1 Vol.-Teile mit Hesse

PURA-NATURA-Härter HDR 72



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de



DIN 53160 Part 1 and Part 2 (resistance against saliva and sweat simulation); No discolouration (Level 5) PVC-resistant

General guidelines for handling

Of Hydro materials:

The wood moisture should lie between 8-12%. Please do not process and dry HYDRO lacquers at RT below 18 °C. The ideal humidity level for lacquering lies between 55-65%. To avoid adhesion problems, please freshly sand the lacquer surfaces before application and whenever possible, immediately apply the top coat to the sanded surfaces. Water-soluble wood ingredients such as those from ash and tannic acids from woods like e.g. oak may cause colour changes and discolorations in the coating.

Therefore, as a rule, we recommend to make a test coating to evaluate the colour effect, adhesion and the drying process under practical conditions. Guidelines for cleaning and care:

Please note care instructions in accordance with DIN 18356. Clean the parquet slightly wettish, with soft cloth. Not wet! Use only neutral detergents without silicone, ammonium chloride and scrubbing agents. Regular cleaning and care with Hesse PROTECT-CLEANER PR 90 with Carnauba wax and Hesse INTENSIVE-CLEANER PR 91 increases the useful life of the finish.

Ordering hints

dull mat	HDE 52-0
Container sizes	4,5 l
Hardener	HDR 72
Container sizes, hardener	0,45 l
Productivity per litre	8 - 10 m ²
Thinner	H2O max. 5 % only for spray application
Hesse CLEANING-AGENT	DV 9 for removing dried lacquer residues
Post-treatment/care products	PR 90, PR 91
Giscode:	W3/DD+

General advice/exclusion

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Hesse RESIN-OIL OE 82 -x(degree of gloss)



Oil with linseed oil base, also with alkyde resin modified with natural oil with addition of lead and cobalt-free siccatives, semi mat, diluted with iso-paraffin, viscoplastic, hard-wearing, highly abrasion-resistant.



Does not contain any hazardous substances according to annex XIV of EU-regulation 1907/2006 (REACH) Fulfills DIN EN 71-3:2002-11 (safety of children's toys)



Product fulfills the specifications of the Directive on Dyes and Lacquers containing solvents: ChemVOC FarbV- from 23.12.2004 (Decopaint guideline)



Emission-tested building product according to DIBt-principles connected with Hesse Synthetic resin finishes, permit no. Z-157.10-112
General technical approval - surface coating for parquets and wooden floors

Fields of application

in the entire field of interior completion and for coating of furniture for parquet and wooden floors as well as OSB panels and cork floors, as well as also for staircases and handrails. The stability and abrasion resistance depends upon the amount of material applied

Handling guidelines

Single- to triple-coat application with 30 - 60 g/m² on properly prepared substrates. The floor must be sanded thoroughly down to the wood, dry and free from oil, fat, wax, silicones and sanding dust.

Ground treatment: Final sanding of wood floor with grain size 100 - 120, according to wood type and desired effect, also grain size 180/ Raw wood sanding for furniture surfaces 240. dust removal. Intermediate sanding grain size 120 - 240/ dust removal.

The intermediate sanding is to be adjusted to the desired application amount; the lesser the application amount, the finer the sanding (up to 240 grain when padding). The quality of the wood sanding is a decisive factor for the quality of the final surface.

Mixture 100 : 4 with OR 88

Mixture 10 : 1 with OR 87 accelerates the through-drying and increased the mechanical and chemical resistance of the surface.

Processing time of the mixture: 1 hour at 20 °C.

Material dries by oxidation, please observe the general guidelines for processing!

Drying

Good ventilation necessary.

Sandable and recoatable: after 16 h 20 °C

Accessibility: after 24 h 20 °C

Complete hardening 10 - 14 d 20 °C

Recoatable:

Possible with itself or with suitable colourless materials, see under „Special Guidelines“.

The parquet may not be covered with foils or carpets before having attained the final hardness.

Application example

Planed timber floor boards, oak semi gloss

- Wood-sanding - grain size 100

- Base coat 1 x 10 - 30 g/m²

Hesse NATURAL-OIL OE 83-9 putty and pad in immediately afterwards

- Intermediate drying for at least 16 h 20 °C

- Coating 1 - 2 x 40 - 60 g/m² Hesse RESIN-OIL OE 82-4 with a suitable roller

- Intermediate drying for at least 16 h 20 °C - slight interim sanding grain size 120 - 150 with sanding lattice

- Accessible after 24 h 20 °C

- Full load capacity after 10 d 20 °C

Technical data

Delivery Condition:	liquid
Shade:	brownish
Supply viscosity:	53 - 59 s / DIN 4 mm/20 °C

Non-volatile components:	52 %
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Density:	kg/l at 20 °C
Flashpoint:	43 °C

Storage stability:	99 weeks in the closed original container
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Storage temperature:	15 - 25 °C
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Further information on storage: Due to the high reactivity, skin formation may occur; please remove skin before stirring.

Storage class according to the Occupation Safety Ordinance: Flammable.

Please note actual Safety Data Sheet!

Application method

Brush/Roll with lint-free rollers, i.e. of shorthair mohair. During the first use, remove loose hairs with adhesive tape

Dilute the first coat with 10 - 20 % OV 5100, then level thinly and then immediately pad in. Larger surfaces should be treated by two people. Rapid rolling prevents stop lines; work in the direction of the wood grain.

Special advice

For surfaces with natural look (spare coating) better use OE 83-(gloss).

Material is not suitable for woods, which are prone to bluing in wet rooms. The material's properties were tested on standard timbers such as oak, beech etc. When using on other woods, please test adhesion before use! After sufficient drying and proper sanding, recoatable with e.g., OE 82-GG

Hesse RESIN-OIL OE 82 -x(degree of gloss)



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

General guidelines for handling

Of oxidativ drying materials:

For cotton cloths, cardboard and paper soaked in oil, there is a danger of self-ignition due to heat accumulation; therefore, let these materials air-dry while spread out and then dispose them properly. Also wood dusts soaked in oil tend to self-ignition - please do not dispose these in closed containers.

Please make a test coating under practical working conditions! Guidelines for cleaning and care: Please note care instructions in accordance with DIN 18356. Clean the parquet slightly wettish, with soft cloth. Not wet! Use only neutral detergents without silicone, ammonium chloride and scrubbing agents. Regular cleaning and care with Hesse PROTECT-CLEANER PR 90 with Carnauba wax and Hesse INTENSIVE-CLEANER PR 91 increases the useful life of the finish.

Ordering hints

semi mat	OE 82-4
silky gloss	OE 82-7
Container sizes	1/2,5 l
Hardener	OR 88
Container sizes, hardener	0,25 l
Hardener	OR 87
Container sizes, hardener	0,25 l
Productivity per litre	25 - 33 m ²
Thinner	OV 5100
	for objects, which are subject to ChemVOVFarbV decree - add max. 10 %
Post-treatment/care products	PR 90, PR 91
Giscode:	KH1

General advice/exclusion

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Hesse NATURAL-OIL OE 83 -x(degree of gloss)

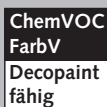


Oil with linseed oil base, also with alkyde resin modified with natural oil with addition of lead and cobalt-free siccatives, viscoplastic, abrasion-resistant, diluted with iso-paraffin. For open-pored, vapour-permeable surfaces Emission-tested building product according to DIBT-rules (German Institute for constructional engineering).



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds

Fulfills DIN EN 71-3:2002-11 (safety of children's toys)



Product fulfills the specifications of the Directive on Dyes and Lacquers containing solvents: ChemVOC FarbV- from 23.12.2004 (Decopaint guideline)



General technical approval - surface coating for parquets and wooden floors, permit no. Z-157.10-112

Emission-tested building product according to DIBT-rules (German Institute for constructional engineering).

Fields of application

For parquet- and furniture coatings for surface treatment of wood used in the interior area, such as living-room, bedroom and children's furniture; also for wall and ceiling panelling. The stability and abrasion resistance depends upon the amount of material applied

Handling guidelines

Single- to double-coat application with 8-20 g/m² on properly prepared substrates. The carrier must be sanded thoroughly to the raw wood; it must be dry and free from oil, fat, wax, silicones and sanding dust. Ground treatment: Final sanding of wood floor with grain size 150/ dust removal. Raw wood sanding for furniture surfaces grain size 240 - 320 dust removal the quality of the sanding is a decisive factor for the quality of the final surface. Mixture 10 : 1 with OR 87 or Mixture 100 : 4 with OR 88 increases the mechanical and chemical resistance of the surface. Processing time of the mixture: 1 hour at 20°C. Adding hardener accelerates the complete drying. Material dries by oxidation, please observe the general guidelines for processing!

Drying

Good ventilation necessary.
Application of the next coat: after 16 h 20 °C
Accessibility: after 24 h 20 °C
Full load capacity: after 10 d
The parquet may not be covered with foils or carpets before having attained the final hardness.

Application example

parquet, oak mat
- Wood-sanding grain - size 120 - 150
- Coating 2 x 30 - 40 g/m²
Hesse NATURAL-OIL OE 83-2
Mixture 10:1 Hesse Hardener OR 87 putty and pad in immediately afterwards
- Intermediate sanding for at least 16 h 20 °C
- Accessible after 24 h 20 °C
- Full load capacity after 10 d 20 °C

Technical data

Delivery Condition:	liquid
Shade:	brownish
Supply viscosity:	15 - 19 s / DIN 4 mm/20 °C according to degree of gloss
Non-volatile components:	47 - 50 % according to degree of gloss
Density:	0,9 - 0,93 kg/l at 20 °C
Flashpoint:	48 °C
Storage stability:	1 year in the closed original container
Storage temperature:	15 - 25 °C

Further information on storage: Due to the high reactivity, skin formation may occur; please remove skin before stirring.
Storage class according to the Occupation Safety Ordinance: Flammable.
Please note actual Safety Data Sheet!

Application method

Manual puttying:
putty or roll thinly; immediately thereafter, pad/grind in. Larger surfaces should be treated by two people. Stir well before use!
Manual application:
Sand in with sanding fleece and remove surplus with cotton cloths.

Special advice

Material is not suitable for woods, which are prone to bluing in wet rooms. The material's properties were tested on standard timbers such as oak, beech etc. When using on other woods, please test adhesion before use! In order to avoid white pores on dark, porous wood, we recommend -at least for the first layer - to use the glossy version of the oil. Pre-priming is possible e.g. with the following products, according to the desired surface and the respective substrate material: OE 82-4, OE 82-7.

Hesse NATURAL-OIL OE 83 -x(degree of gloss)



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

General guidelines for handling

Of oxidativ drying materials:

For cotton cloths, cardboard and paper soaked in oil, there is a danger of self-ignition due to heat accumulation; therefore, let these materials air-dry while spread out and then dispose them properly. Also wood dusts soaked in oil tend to self-ignition - please do not dispose these in closed containers.

Please make a test coating under practical working conditions! Guidelines for cleaning and care: Please note care instructions in accordance with DIN 18356. Clean the parquet slightly wettish, with soft cloth.

Not wet! Use only neutral detergents without silicone, ammonium chloride and scrubbing agents. Regular cleaning and care with Hesse PROTECT-CLEANER PR 90 with Carnauba wax and Hesse INTENSIVE-CLEANER PR 91 increases the useful life of the finish.

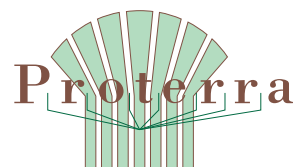
Ordering hints

mat	OE 83-2
glossy	OE 83-9
Container sizes	1/2,5 l
Hardener	OR 87
Container sizes, hardener	0,25 l
Hardener	OR 88
Container sizes, hardener	0,25 l
Productivity per litre	25 - 33 m ²
Thinner	OV 89
Post-treatment/care products	PR 90, PR 91
Giscode:	KH1

General advice/exclusion

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Proterra NATURAL SOLID-OIL GE 11254



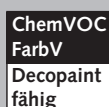
Oil based on linseed-oil, free of lead-and colbalt siccatives, with mild odour, low-solvent with good accentuation of the wood grains and excellent chemical and mechanical resistance properties.



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds, certificate ZR-12-08-02-04



DIN EN 71-3:2002-11 (safety of toys)



Product fulfills the specifications of the Directive on Dyes and Lacquers containing solvents: ChemVOCFarbV- from 23.12.2004 (Decopaint guideline)



DIN 51130, anti-slip properties
R 10
Testing no.
201322005/3210

Fields of application

For parquet- and furniture coatings For surface treatment of wood used in the interior area, such as living-room, bedroom and children's furniture; also for wall and ceiling panelling.

Handling guidelines

Two- to triple-coat application with 6 - 20 g/m² on suitable carriers, max. total moist application amount: 30 - 40 g/m².

Ground treatment: On clean, dry wood, according to wood type, application process and desired effect. grain size 240 - 320/ dust removal Sand in with fine sanding fleece; remove surplus with a cotton cloth. The surface should appear dry; Otherwise, final drying may be disturbed. Graduated raw wood sanding for parquet surfaces: grain 120-150 / remove dust. Apply material with a suitable putty knife; after short exposure time incorporate the material regularly with a one-disc machine and white, non-abrasive pad, until the surface looks dry. Mixture 100 : 4 with OR 88 accelerates the through-drying and increase the mechanical and chemical resistance of the surface.

Processing time of the mixture: 1 hour at 20°C. Hardener contains isocyanate, please observe safety guidelines, see SdB. Material dries by oxidation, please observe the general guidelines for processing!

Drying

Dependent on application amount, material and ambient temperature, application method and substrate material.

Forced drying possible 30 - 40 °C
Rack drying. Oxidative drying/packable: completed after 16 - 24 h 20 °C

Recoatable:
Possible with itself or with suitable colourless materials, see under „Special Guidelines“.

Application example

In each case, the application method and the exact application parameters are adjusted to the application- and drying conditions. They can be learned from the customer's specific process descriptions.

Gloss level

semi gloss

Technical data

Delivery Condition:	Liquid
Shade:	slightly yellowish
Supply viscosity:	40 - 50 s / DIN 4 mm/20 °C
Non-volatile components:	97,3 - 97.5 %
Density:	0,948 - 0,950 g/cm ³ at 20 °C
Flashpoint:	> 60 °C
Storage stability:	99 weeks in the closed original container
Storage temperature:	10 - 30 °C
Further information on storage:	Due to the high reactivity, skin formation may occur; please remove skin before stirring. Please note actual Safety Data Sheet!

Application method

Spraying:
Addition of thinner required.
OV 1200
Sand in with sanding fleece and remove surplus with cotton cloths.

Air spraying (cup gun)
Spray nozzle size: 1,5 - 1,8 mm
Spray pressure: 2 - 3 bar

Airless spraying
Spray nozzle size: 0,23 - 0,28 mm
Spray pressure: 50 - 80 bar

Manual application
Sand in with sanding fleece and remove surplus with cotton cloths.

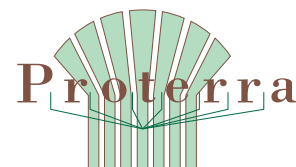
Roll with roller: smooth roller (Perbonan quality). Completely remove excess with sisal brushes or Molton aggregate

Application by putty machine: manual subsequently apply by white sanding fleece without residue

Special advice

On hard timbers dilute with 20 % OV 1200.
For lacquering the interior of cabinets, we recommend (due to its low self odour) Proterra Resit GE 17102.
After sufficient drying, recoatable with e.g. GZ 1020-0001, GZ 1021, GZ 1023.

Proterra NATURAL SOLID-OIL GE 11254



Emission-tested building product according to DIBt-rules (German Institute for constructional engineering). permit no. Z-157.10-146

Emission-tested building product according to DIBT-rules (German Institute for constructional engineering).

DIN 53160 Part 1 and Part



2 (resistance against saliva and sweat simulation); No discolouration (Level 5)

General guidelines for handling

Of oxidativ drying materials:

Coating materials which develop heat when drying (oxidatively drying oils) and coating materials which form easily flammable sedimentations, must not be applied at the same spray booth, because there is a risk of self ignition! (see BGR 500, Chapter 3; „Processing of different types of coating materials“). For cotton cloths, cardboard and paper soaked in oil, there is a danger of self-ignition due to heat accumulation; therefore, let these materials air-dry while spread out and then dispose them properly. Also wood dusts soaked in oil tend to self-ignition - please do not dispose of these in closed containers; as a precaution, whenever possible, do not sand in the spray booth. Please make a test coating under practical working conditions!

Ordering hints

Order no.:	GE 11254
Container sizes	1/2,5/25 l
Hardener	OR 88
Container sizes, hardener	0,25 l
Productivity per litre	30 - 60 m ²
Giscode:	Ö 20+
Thinner	OV 1200
Surface cleaning	GR 1900
Post-treatment/care products	PR 90
	Regular cleaning and care with PR 90 with Carnauba wax and PR 91 increases the useful life of the sealant

General advice/exclusion

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Parquet Colouring

The desire for coloured parquet flooring is as strong now as it has been at any point in history. Current trends suggest dark and exotic woods with rich natural colours are leading the way. No problem! This wish can be fulfilled with an assortment of coordinated parquet stains. Instead of buying expensive, and rare, exotic wood our high quality parquet stains can create both the elegant appearance and interesting, unusual colour variations found in these woods.

Hesse PARQUET COLOUR WPB is a ready to use special stain for parquet flooring. Even large areas can be stained evenly without any trouble.

Hesse parquet stain is water dilutable, environmentally friendly and displays excellent light fastness. The finest pigments available are used to produce stains that give you the desired effect with the minimal of effort. Follow with PURA-ONE HDE 51-(degree of gloss) sealer to complete the finish.





Hesse NATURAL COLOUR-OIL OB 83 is a coloured parquet oil based on linseed, sunflower and jojoba oil. In addition the presence of a natural oil modified alkyd resin ensures significant toughness, flexibility and abrasion resistance. Perfect for spatula application, followed by padding or grinding. The wear and abrasion resistance of the product is dependant on the number of coats applied.

All Hesse parquet stains and colours can be intermixed. Your authorised Hesse dealer carries the full range of colours, but should that not be enough we will match any colour to your exact specifications.



Hesse PARQUET COLOUR WPB 1 x(shade)



Special stain for parquet staining, ready for use, water-dilutable, eco-conscious, with good light-fastness. Light-fast finest pigments provide far-reaching opacity on the wood substrate, but nevertheless realize the desired stain character. Emission-tested building product according to DIBT-rules (German Institute for constructional engineering) associated with OE 82-/OE-83-/OB 83-.



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds



General technical approval - surface coating for parquets and wooden floors, permit no. Z-157.10-112

Emission-tested building product according to DIBT-rules (German Institute for constructional engineering) associated with OE 82-/OE-83-/OB 83-.



DIN 53160 Part 1 and Part 2 (resistance against saliva and sweat simulation); No discolouration (Level 5) The indicated test standards and resistance properties are fulfilled when materials are properly processed.

Fields of application

for parquet and wooden floors with subsequent sealing finish.

If necessary, critical kinds of wood may be pre-treated with colorless WPB 1000 by rolling/spraying and may be worked in by one-disc machine with white pad until the surface is dry! Thus, different levels of rough wood can be denibbed and a more uniform staining picture can be achieved with colored stains.

Handling guidelines

Non-recurring application with 50 - 80 g/m² on professionally laid wood flooring. Ground treatment: The surface to be treated must be clean and dry. Sand the parquet thoroughly and evenly also in the corners; old parquet surfaces must be completely sanded down to the raw wood. grain size 120/ dust removal. The wood humidity should correspond to the well-known guidelines within the scope of floors. Stir and shake material well before use!

Drying

Good ventilation necessary. The ideal room temperature is 16 - 22°C, the relative air humidity 40 - 65 %.

Recoatable: after 16 h 20 °C only with products of the Hesse parquet-range (PUR-, Hydro-lacquers and oils). There's no guarantee if other materials are used.

Technical data

Delivery Condition: low viscosity
Shade: in many attractive colours; colour shade varies according to type of wood!
Density: 1,0 - 1,2 kg/l at 20 °C
Storage stability: 26 weeks in the closed original container
Storage temperature: 10 - 30 °C
Please note actual Safety Data Sheet!

Application method

Spraying: possible with vapourizer
Brush/Roll with lint-free rollers, i.e. of shorthair mohair. During the first use, remove loose hairs with adhesive tape.

Immediately thereafter, equalize the surplus with a single-disc sanding machine with non-abrasive (white) pad to avoid traces and uneven spots. Larger surfaces should be treated by two people. After the levelling, the stain may no longer lay moist on the surface. Rotation tracks from the single-disc machine indicate stain excesses which must be further levelled. For large surfaces, replace pad if necessary. To simplify the dispersion process, the pad can be slightly moistened with water, if necessary. In the area of the edges, remove the excess manually with a piece of pad.

Special advice

All stains from the same series can be mixed with each other. Shadings possible with Hesse colour concentrates of the series: BP 3011, BP 3031, BP 3034, BP 3038-25, BP 3051, BP 3061, BP 3091, BP 3570
Brightening possible with: WPB 1000
Maximum amount for adding BP concentrates (in total): 5 %. Before use, thoroughly stir or shake stains and concentrates.

Hesse PARQUET COLOUR WPB 1 x(Farbton)



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

General guidelines for handling

Of stain:

To attain an attractive result, please observe these guidelines: staining is handwork and requires the corresponding level of experience. To be used preferably on hardwood such as oak and beech. The raw wood reacts differently according to the area in which it grew and the ingredients it contains, also according to the sanding of the raw wood; this influences the shade and effect of the staining to an extent that should not be undervalued - especially the grain run of the woods, e.g. in swirls, limbs etc. is accentuated to create a lively appearance. This especially applies to fine-pored woods such as beech and maple. Woods (e.g. oak) rich in tanning agents, can lead to a yellow to yellowish-brown colour tint. This discoloration occurs more often when lacquering with aqueous systems. Wood is a natural raw material subject to aging processes. Bright and slightly bleeding stain shades change due to yellowing and aging more intensely than darker and intense shade-adjusted stains. Please take into account these influences already when selecting the wood type, the stain shade and the sealant materials. The coating of wooden floors wears down in the course of time, depending on the degree of use. Careful upkeep and/or prompt re-sealing of the colourless coating prevent a costly complete restoration. This becomes absolutely necessary when the stain coat is already damaged. Please perform a test of staining and finish on original to inform yourself and your customers of the result of your work.

Ordering hints

Standard colours:

Cherry	WPB 1001
Cottage Pine	WPB 1002
Mahogany	WPB 1004
Cognac	WPB 1005
Teak	WPB 1006
Smoked Oak	WPB 1007
Walnut	WPB 1008
Chocolate Brown	WPB 1106

Object shades:

Antracite	WPB 1034
Pebble Grey	WPB 1036
Beige	WPB 1037
Sugar Brown	WPB 1105
Vintage Oak	WPB 1160
Smart Grey	WPB 1144
Castle Brown	WPB 1149
Olive Grey	WPB 1154
Container sizes	5 l
Productivity per litre	10 - 20 m ²
Thinner	WPB 1000
Giscode:	W3+
Cleaning thinner	H2O

General advice/exclusion

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Hesse NATURAL-COLOUR-OIL OB 83 -(colour tone)



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

Oil with linseed oil base, also with alkyde resin modified with natural oil with addition of lead and cobalt-free siccatives, pigmented, viscoplastic, abrasion-resistant, containing light protector. For open-pored, vapour-permeable surfaces. Emission-tested building product according to DIBT-rules (German Institute for constructional engineering).



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds



Product fulfills the specifications of the Directive on Dyes and Lacquers containing solvents: ChemVOCFarbV- from 23.12.2004 (Decopaint guideline)



General technical approval - surface coating for parquets and wooden floors, permit no. Z-157.10-112 Emission-tested building product according to DIBT-rules (German Institute for constructional engineering).

Fields of application

For parquet- and furniture coatings for surface treatment of wood used in the interior area, such as living-room, bedroom and children's furniture; also for wall and ceiling panelling.

Handling guidelines

Single- to double-coat application with 8-20 g/m² on properly prepared substrates.

The carrier must be sanded thoroughly to the raw wood; it must be dry and free from oil, fat, wax, silicones and sanding dust.

Ground treatment: Final sanding of wood floor with grain size 150 - 180/ Raw wood sanding for furniture surfaces grain size 240 - 320 dust removal.

The quality of the sanding is a decisive factor for the quality of the final surface.

Mixture 10 : 1 with OR 87 or Mixture 100 : 4 with OR 88 increases the mechanical and chemical resistance of the surface.

Processing time of the mixture: 1 hour at 20 °C. Adding hardener accelerates the complete drying. Material dries by oxidation, please observe the general guidelines for processing!

Drying

Good ventilation necessary.

Application of the next coat: after 16 h 20 °C

Accessibility: after 24 h 20 °C

Full load capacity: after 10 d

The parquet may not be covered with foils or carpets before having attained the final hardness.

Application example

Planned timber floor boards, oak coloured

- Wood-sanding - grain size 150

- Coating 2 x 20 - 30 g/m²

Hesse NATURAL-COLOUR-OIL OB 83-700 putty and pad in immediately afterwards

- Intermediate drying for at least 16 h 20 °C

- Accessible after 24 h 20 °C

- Full load capacity after 10 d 20 °C

Technical data

Delivery Condition:	liquid
Shade:	in many attractive colours; colour shade varies according to type of wood!
Supply viscosity:	30 - 50 s / according to colour tone; DIN 4 mm/20 °C
Non-volatile components:	50 - 60 %
Density:	0,980 - 1,03 kg/l at 20 °C
Flashpoint:	> 21 °C
Storage stability:	1 year in the closed original container
Storage temperature:	15 - 25 °C
Further information on storage:	Due to the high reactivity, skin formation may occur; please remove skin before stirring.
Storage class according to the Occupation Safety Ordinance:	Flammable.
	Please note actual Safety Data Sheet!

Application method

Manual puttying:

putty or roll thinly; immediately thereafter, pad/grind in. Larger surfaces should be treated by two people.

Manual application:

Sand in with sanding fleece and remove surplus with cotton cloths.

Special advice

Materials of the same series can be mixed with each other.

Brightening possible with:

OE 83-2

Shade adjustments possible with

OP 80.. < 3%

Material is not suitable for woods, which are prone to bluing in wet rooms. The material's properties were tested on standard timbers such as oak, beech etc. When using on other woods, please test adhesion before use!

General guidelines for handling

Of oxidativ drying materials:

For cotton cloths, cardboard and paper soaked in oil, there is a danger of self-ignition due to heat accumulation; therefore, let these materials air-dry while spread out and then dispose them properly. Also wood dusts soaked in oil tend to self-ignition - please do not dispose these in closed containers.

Please make a test coating under practical working conditions!

Hesse NATURAL-COLOUR-OIL OB 83 -(colour tone)



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de



DIN EN 71-3:2002-11
(safety of toys)
Free from wood
preservatives

Guidelines for cleaning and care: Please note care instructions in accordance with DIN 18356. Clean the parquet slightly wettish, with soft cloth. Not wet! Use only neutral detergents without silicone, ammonium chloride and scrubbing agents. Regular cleaning and care with Hesse PROTECT-CLEANER PR 90 with Carnauba wax and Hesse INTENSIVE-CLEANER PR 91 increases the useful life of the finish.

Ordering hints

Standard colours:

White	OB 83-700
Ebony	OB 83-901
Grey	OB 83-703
Castle Brown	OB 83-702
Light Walnut	OB 83-803
Dark Walnut	OB 83-804
Black	OB 83-900
Olive Grey	OB 83-740
Teak	OB 83-133
Container sizes	1/2,5 l
Hardener	OR 87
Container sizes, hardener	0,25 l
Hardener	OR 88
Container sizes, hardener	0,25 l
Productivity per litre	25 - 33 m ²
Thinner	OV 89
Post-treatment/care products	PR 90, PR 91
Giscode:	KH1

General advice/exclusion

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Hesse PRIMER WHITE-OIL OB 84-77



Mixture ratio: 10 : 1
with Hardener OR 87



Parquet oil based on linseed, sunflower and jojoba oil, also with alkyd resin modified with natural oil, free of lead-and colbalt siccatives, viscoplastic, pigmented, abrasion-resistant. Emission-tested building product according to DIBT-rules (German Institute for constructional engineering) associated with Hesse Hydro lacquers.



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds

ChemVOC
FarbV
Decopaint
fähig

Product fulfills the specifications of the Directive on Dyes and Lacquers containing solvents:
ChemVOCFarbV- from 23.12.2004 (Decopaint guideline)



Emission-tested building product according to DIBT-rules (German Institute for constructional engineering) associated with Hesse Hydro lacquers. Z-157.10-61
General technical approval - surface coating for parquets and wooden floors

Fields of application

In the living area for parquet and wooden floors as translucent base coat under Hesse PURA-ONE or PURA-NATURA, primarily on oak.

Handling guidelines

Single- to double-coat application with 20 - 40 g/m² on professionally laid wood flooring. The floor must be sanded thoroughly down to the wood, dry and free from oil, fat, wax, silicones and sanding dust.

Ground treatment: Final sanding of wood floor with grain size 150 - 180/ dust removal. Intermediate sanding/single disk sander grain size 180 - 240 with sanding disk/white pad / dust removal.

Material dries by oxidation, please observe the general guidelines for processing!

Handling interval

1h

Drying

Good ventilation necessary.
Recoatable: after 16 h 20 °C

Application example

woodfloor, oak white

- Wood-sanding - grain size 150
- Base coat 1 - 2 x 20 - 40 g/m²
Hesse PRIMER WHITE-OIL
Mixture 10 : 1 Hardener OR 87 putty and pad
in immediately afterwards
- Intermediate drying for at least 16 h 20 °C
- Final coat 2 x 100 - 120 g/m²
Hesse PURA Natura
Mixture 10 : 1 Hardener HDR 72
- Intermediate drying appr. 16 h 20 °C
- Intermediate sanding with grain size 120 er
with sanding lattice
- Accessible after 24 h 20 °C
- Full load capacity after 10 - 14 d 20 °C

Technical data

Delivery Condition:	liquid
Shade:	white
Supply viscosity:	20 - 24 s / DIN 4 mm/20 °C
Non-volatile components:	59,5 - 60,5 %
Density:	1,01 - 1.012 kg/l at 20°C
Flashpoint:	> 21 °C
Storage stability:	1 year in the closed original container
Storage temperature:	15 - 25 °C

Further information on storage: Due to the high reactivity, skin formation may occur; please remove skin before stirring.

Storage class according to the Occupation Safety Ordinance: Flammable.

Please note actual Safety Data Sheet!

Application method

Manual puttying:
putty or roll thinly; immediately thereafter, pad/grind in. Larger surfaces should be treated by two people.

Special advice

Material is not suitable for woods, which are prone to bluing in wet rooms.

General guidelines for handling

Of oxidativ drying materials:
For cotton cloths, cardboard and paper soaked in oil, there is a danger of self-ignition due to heat accumulation; therefore, let these materials air-dry while spread out and then dispose them properly. Also wood dusts soaked in oil tend to self-ignition - please do not dispose these in closed containers.

Please make a test coating under practical working conditions!

Ordering hints

Order no.:	OB 84-77 / white
Container sizes	2,5 l
Hardener	OR 87
Container sizes, hardener	0,25 l
Productivity per litre	25 - 33 m ²
Thinner	OV 89
Giscode:	KH1

General advice/exclusion

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Hesse additive HZ 75 slide-blocking



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

Hesse Hydro Additive

Fields of application

Additive for increasing slide-blocking according to BGR 181 (DIN 51130)

Dosage: 10% into suitable Hydro Finishes

Handling guidelines

Add 10% of the paste into a suitable coating material and dispense it homogeneously by intensive stirring / shaking.

Technical data

Delivery Condition: liquid
 Shade: whitish
 Non-volatile components: 27 - 28 %
 Density: 1,00 kg/l at 20 °C
 Storage temperature: 5 - 30 °C
 Please note actual Safety Data Sheet!

Special advice

After addition of 10% additive into the last coat, the principles in valuation group R 9 for slide-blocking are fulfilled.

Incorporate material well! Tested and confirmed in the Hesse PURA-ONE HDE 51-X(GG)!

Ordering hints

Order no.: HZ 75
 Container sizes 1 l

General advice/exclusion

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UV - Finally optimised for professional use on site:

Split second hardening with high-energy UV Light. This benefits the processor by offering excellent resistance and a significantly earlier ability to withstand heavy traffic. Shorter processing times mean customers have access to the site almost immediately, therefore reducing any potential loss of earnings.

UV-Hardening, what's new?

The first historical use dates back to the ancient Egyptians, who used linen cloths soaked in bitumen to mummify the dead. Sunlight hardened the bitumen and thus permanently preserved the body.

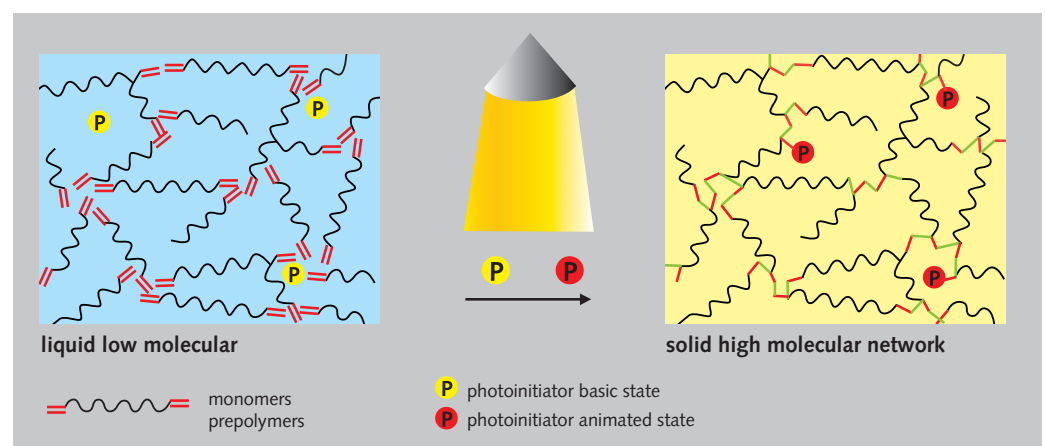
Since the 1960s UV curable lacquers have been used for the industrial coating of wood, paper, etc, Both for protective and decorative purposes. The UV-induced hardening process results in a highly cross-linked surface characterised by class leading chemical and mechanical resistance (abrasion limitation being particularly notable).

The special floor parquet coatings are applied, as usual, evenly on the surface. After a relatively short drying period, the dried surfaces are hardened with special UV lamp units.

UV-Curing, how does it function?

Photoinitiators contained within the lacquer film are animated by the high energy UV light. In this state they cause extremely fast chemical cross-linking (polymerization) with the binder components to form a densely interlinked and extremely durable lacquer film. After a stabilization period of a few minutes the surface is, for the most part, completely cured and ready for use.

Schematic procedure of the hardening reaction:



Special protective considerations are necessary during the UV curing process. Please read the relevant technical information before use, or consider visiting us to take advantage of one of our courses on the subject.

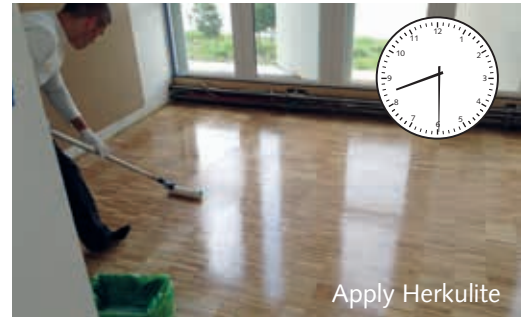
UV - Finally optimised for professional use on site:



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de



Apply Primer Ultra



Apply Herkulite



UV-Curing



Sanding and extraction



2nd application of Herkulite



UV-Curing



Walkable surface



Hesse HERKULITE HUE 8606 x(degree of gloss)



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

Water-dilutable, UV-curing Parquet Finish for non-industrial application; solvent-free, clear, ready for use, highly scratch- and scrub-resistant; Top class sealer for open-and closed-pore structures on suitable substrates with very good resistance to chemical and mechanical strain.



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds

Fulfills DIN EN 71-3:2002-11 (safety of children's toys)



Emission-tested building product according to DIBt-rules (German Institute for constructional engineering). applied for



DIN 68861, part, 1B
DIN 53160 Part 1 and Part 2 (resistance against saliva and sweat simulation); No discolouration (Level 5)
PVC-resistant

Fields of application

For parquet coating for surfaces with highest resistance to chemical and mechanical strain, therefore ideal for intensely stressed surfaces

Handling guidelines

Two- to triple-coat application with 100 - 120 g/m² on properly prepared substrates, max. total moist application amount: 400 g/m². Ground treatment: Proper sanding of the suitable substrate grain size 120 dust removal. Slight interim sanding grain size 120 - 180. single disk sander.

The quality of the wood sanding is a decisive factor for the quality of the final surface. Stir material well before use!

Drying

Dependent on amount applied, temperature of lacquer and surroundings, humidity, application process and substrate material

Accessibility: after 1,5 - 2 h

Too high humidity, low temperature or insufficient air exchange may significantly prolong the evaporation interval. UV curing: with suitable mobile UV-lamp unit (e.g. Floormate by company DecoRad or comparable); 1 Hg-lamp 80W/cm; forward feed: ca. 7 m/min. Please follow the processing and handling instructions and wear the personal protective equipment! Recoatable: Possible with itself or with suitable colourless materials, see under „Special Guidelines“.

Application example

parquet, oak industrial/upended parquet

- Pre-treatment - of the carrier:
- Wood-sanding graduated with grain size 80 - 120
- Puttying: Hesse WOOD-FILL HS 11
- Drying appr. 1 h 20 °C
- Sanding graduated with grain size 80 - 120
- dust removal
- Base coat 1 x 80 - 100 g/m²
 - Primer ULTRA HG 24 with a suitable roller
- Drying appr. 1,5 - 2 h
- Coating 1 x appr. 100 - 120 g/m² Hesse HERKULITE HUE 86064 semi gloss with a suitable roller
- Drying 2 h at appr. 20°C
- UV hardening 1 x with suitable mobile UV-lamp unit (e.g. Floormate by company DecoRad or comparable); 1 Hg-lamp 80W/cm; forward feed: ca. 7 m/min. Please

follow the processing and handling instructions and wear the personal protective equipment!

- slight interim sanding grain size 120 - 150 with one-disc sanding machine
 - dust removal
 - Coating 1 x appr. 100 - 120 g/m² Hesse HERKULITE HUE 86064 semi gloss with a suitable roller
 - Drying appr. 2 h 20°C
 - UV hardening 1 x with suitable mobile UV-lamp unit (e.g. Floormate by company DecoRad or comparable); 1 Hg-lamp 80W/cm; forward feed: ca. 7 m/min. Please follow the processing and handling instructions and wear the personal protective equipment!
- Now the surface is ready and after short cooling time it can be burdened immediately. If required, the surface can be slightly sanded once again and once recoated with Hesse HERKULITE HUE 8606x with following drying and UV-curing!

Gloss level

mat
semi mat
gloss

Technical data

Delivery Condition:	Liquid
Shade:	colourless
Supply viscosity:	22 - 28 s / DIN 4 mm/20 °C
Non-volatile components:	40 - 41 % according to degree of gloss
Density:	1,06 - 1,065 kg/l at 20 °C
Storage stability:	26 weeks in the closed original container
Storage temperature:	10 - 25 °C

Please note actual Safety Data Sheet!

Application method

Brush/Roll with a suitable roller
Clean tools with water. Dried lacquer residue can be removed with Hesse CLEANING-AGENT DV 49.

Hesse HERKULITE HUE 8606 x(degree of gloss)



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

Special advice

Shield opened containers from light (with proper cover/lid). Close after use! Remove dried-up lacquer residues with a sieve. Due to the high side-bonding effect of hydro-UV products Hesse HERKULITE HUE 8606x (GG) should not be used without proper primer on sprung floors, underfloor heating or shear-resistant glued parquet and also not on wooden paving, planks or opened parquet without side-impregnation. In these instances it is essential to use a suitable primer, e.g. Hesse Primer Ultra HG 24! Attention! Before irradiation of the dried sealing coat the seal layer must be completely moisture-free! This is ideally tested by moisture measuring device! In the event of non-compliance there may be disturbances in film-building and/or adhesion. In this case the surface must be sanded off completely and rebuilt again! The use of a mobile radiator requires well-founded knowledge! The use of personal protective equipment is a stringent necessity to avoid impairment to health! Please follow the corresponding company ruling and the user manual of the device manufacturer! The regular, professional cleaning and care with e.g. Hesse PROTECT-CLEANER or other Hesse parquet care products ensures the long-lasting protective function of the sealing layer! To minimise the risk of side glueing, critical substrates such as i.e., wooden pavement, upright ribs, planed floor boards, parquet on underfloor heatings etc. require a proper pre-treatment with Hesse Primer Ultra HG 24 Parquet floors which have already been lacquered with solvent-containing systems should only be touched up with systems which contain solvents, to prevent the risk of spot formation!

General guidelines for handling

Of Hydro materials:

When processing HYDRO materials, any material-containing parts must be made of stainless steel. The wood moisture should lie between 8-12%. Please do not process and dry HYDRO lacquers at RT below 18°C. The ideal humidity for application lies between 55-65%. To avoid adhesion problems, please freshly sand the lacquer surfaces before application and whenever possible, immediately apply the top coat to the sanded surfaces. Under certain circumstances, timbers with a high wax content (i.e. teak) have a negative influence on the bonding. Water-soluble wood ingredients such as those from ash and tannic acids from woods like e.g. oak may cause colour changes and discolorations in the coating.

Of UV materials:

Always shield opened containers from light (cover). Close tightly after use! Regularly clean lamps and reflectors with a soft, lint-free cloth

and CV 570. Only touch the lamps with cotton gloves. Pay attention to the hours of operation for the lamps and change them according to the manufacturer's recommendation.

Please make a test coating under practical working conditions!

Ordering hints

mat	HUE 86063
semi gloss	HUE 86064
glossy	HUE 86068
Container sizes	5 / 25 l
Productivity per litre	6 - 8 m ²
Giscode:	W 1
Thinner	H2O max. 5 %
Cleaning thinner	H2O
Cleaning thinner for removal of dried lacquer rests	Hesse CLEANING AGENT DV 9; NV 3920, ZD 82

General advice/exclusion

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Hesse PROTECT-OIL OE 88-2



Parquet oil based on linseed, sunflower and jojoba oil, also with alkyd resin modified with natural oil, free of lead-and cobalt siccatives, hard-wearing, viscoplastic, highly abrasion-resistant for the application of the putty with subsequent padding or grinding technique. For the care and repair of oiled floors.



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds
Fulfils DIN EN 71-3:2002-11 (safety of children's toys)



Product fulfills the specifications of the Directive on Dyes and Lacquers containing solvents:
ChemVOC FarbV- from 23.12.2004 (Decopaint guideline)

Fields of application

for parquet and wooden floors, which are coated with oil.

Handling guidelines

Single-coat application with 10 - 30 g/m² on suitable carriers.

Ground treatment: Remove loose dirt with vacuum cleaner or fine broom. For basic cleaning of water-soluble dirt, add Hesse INTENSIVE-CLEANER PR 91 to the wipe water and clean the floor with this mixture. Then wipe and if possible, let it dry overnight. For persistent spots and dirt, sand the entire surface, do not sand through all layers; grain size 240; dust removal.

Mixture 10 : 1 with OR 87 increases the mechanical and chemical resistance of the surface.

Processing time of the mixture: 1 hour at 20 °C. Adding hardener accelerates the complete drying. Material dries by oxidation, please observe the general guidelines for processing!

Drying

Good ventilation necessary.

Accessibility: after 24 h 20 °C

Complete hardening 10 - 14 d 20 °C

The parquet may not be covered with foils or carpets before having attained the final hardness. Recoatable:

with itself

Application example

woodfloor, Beech, oily, heavily soiled
Clean the floor according to regulations.

- Polish

- Coating 1 x 10 - 20 g/m²

Hesse PROTECT-OIL

putty and pad in immediately afterwards

- Accessible after 24 h 20 °C

- Full load capacity after 10 - 14 d 20 °C

Gloss level

12-16 Gloss/36 µm mat
DIN 67530 / 60°
application on photo
cardboard

Technical data

Delivery Condition: liquid
Shade: brownish
Supply viscosity: 31 - 39 s / DIN EN ISO
2431 - 4 mm
50 - 51 %

Non-volatile components: 50 - 51 %
Density: 0,933 kg/l at 20 °C
Flashpoint: > 21 °C
Storage stability: 1 year in the closed original container

Storage temperature: 15 - 25 °C

Further information on storage: Due to the high reactivity, skin formation may occur; please remove skin before stirring.

Storage class according to the Occupation Safety Ordinance: Flammable.

Please note actual Safety Data Sheet!

Application method

Manual puttying:
putty or roll thinly; immediately thereafter, pad/grind in. Larger surfaces should be treated by two people.

Manual application: also partially possible
Disperse Hesse PROTECT-OIL with white cotton cloth or wide grinding fleece thinly and evenly on the surface and remove excess with cotton cloth.

Special advice

Material is not suitable for woods, which are prone to bluing in wet rooms.

Hesse PROTECT-OIL OE 88-2



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

General guidelines for handling

Of oxidativ drying materials:

Coating materials which develop heat when drying (oxidatively drying oils) and coating materials which form easily flammable sedimentations, must not be applied at the same spray booth, because there is a risk of self ignition! (see BGR 500, Chapter 3; „Processing of different types of coating materials“). For cotton cloths, cardboard and paper soaked in oil, there is a danger of self-ignition due to heat accumulation; therefore, let these materials air-dry while spread out and then dispose them properly. Also wood dusts soaked in oil tend to self-ignition - please do not dispose of these in closed containers; as a precaution, whenever possible, do not sand in the spray booth. Please make a test coating under practical working conditions!

Guidelines for cleaning and care: Please note care instructions in accordance with DIN 18356. Clean the parquet slightly wettish, with soft cloth. Not wet! Use only neutral detergents without silicone, ammonium chloride and scrubbing agents. Regular cleaning and care with Hesse PROTECT-CLEANER PR 90 with Carnauba wax and Hesse INTENSIVE-CLEANER PR 91 increases the useful life of the finish.

Ordering hints

mat	OE 88-2
Container sizes	1 l
Hardener	OR 87
Container sizes, hardener	0,25 l
Productivity per litre	25 - 33 m ²
Thinner	OV 89
Post-treatment/care products	PR 90, PR 91
Giscode:	KH1

General advice/exclusion

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Hesse PROTECT-CLEANER PR 90



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

Cleaners and care products for furniture surfaces and wooden floors, based on pH-neutral and biodegradable tensides



Free of colorings and thickeners
organic solvents

Fields of application

for parquet and wooden floors as well as laminate, PVC, tiles and synthetic surfaces, not suitable for mirrors, marble or non-slip surfaces.

Handling guidelines

Add to the wipe water for regular cleaning. With this solution, wipe misty-moist - not wet. This way, the surface is cleaned and maintained in one work process. Maintenance care or regular cleaning and care: for slight soilings, dilute cleaner with water in the ratio 1 : 100 (100 ml to 10 l water). Intensive cleaning: for strong soilings or for thorough care, if necessary, use a higher dose, up to max. 1 : 10 (100 ml to 1 l water). Stain removal: for coffee, tea, milk, juice, urine, blood - PR 90 with water

Drying

Recoatable:
Following proper pre-treatment with products adjusted to the sealant.

Technical data

Delivery Condition:	liquid
Shade:	whitish
Supply viscosity:	11 s / DIN 4 mm/20 °C
Non-volatile components:	3,3 %
Density:	1,0 kg/l at 20 °C
Storage stability:	1 year in the closed original container
Storage temperature:	10 - 40 °C

Please note actual Safety Data Sheet!

Application method

Wipe misty-moist!

Special advice

Keep in a locked place out of reach of children!
Only bring completely empty containers to the recycling centre/collection site.

General guidelines for handling

Guidelines for cleaning and care: Please note care instructions in accordance with DIN 18356. Clean the parquet slightly wettish, with soft cloth. Not wet! Use only neutral detergents without silicone, ammonium chloride and scrubbing agents. Regular cleaning and care with Hesse PROTECT-CLEANER PR 90 with Carnauba wax and Hesse INTENSIVE-CLEANER PR 91 increases the useful life of the finish.

Ordering hints

Order no.:	PR 90
Container sizes	1 l
Ingredients specifications according to regulation (EC) no. 648/2004:	< 5 % non-ionic tensides. Contains scents, 2-methylisothiazol-3(2H)-one, 1,2-benzisothiazol-3(2H)-one.
further ingredients:	Carnauba wax
Report according to WRMG:	Company code: 3777
Product number:	2011861
Data Sheet for medical staff available under:	info@hesse-lignal.de

General advice/exclusion

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Hesse INTENSIVE-CLEANER PR 91



Cleaner product for wooden floors, based on pH-neutral and biodegradeable tensides with high cleaning effect.



Free of colorings and thickeners

Fields of application

For Cleaning for parquet and wooden floors as well as laminate, PVC, tiles and synthetic surfaces.

Handling guidelines

Apply PR 91 diluted with water. Intensive cleaning : For strong dirt or for intensive maintenance add up to max. 1:10 (100ml PR 91 in 1 l water). For cleaning of Hydro-lacquer surfaces or for lesser dirt add 1:500 (20 ml PR 91 in 10L water)

Drying

Recoatable:
Following proper pre-treatment with products adjusted to the sealant.

Technical data

Delivery Condition: liquid
Shade: whitish
Supply viscosity: 11 s / DIN 4 mm/20 °C
Non-volatile components: 4,8 %
Density: 0,992 kg/l at 20 °C
Storage stability: 1 year in the closed original container
Storage temperature: 10 - 30 °C
Please note actual Safety Data Sheet!

Application method

Wipe misty-moist!

Special advice

Before use, inspect the surface for resistance to Hesse INTENSIVE CLEANER! Keep in a locked place out of reach of children! Only bring completely empty containers to the recycling centre/collection site.

General guidelines for handling

Guidelines for cleaning and care: Please note care instructions in accordance with DIN 18356. Clean the parquet slightly wettish, with soft cloth. Not wet! Use only neutral detergents without silicone, ammonium chloride and scrubbing agents. Regular cleaning and care with Hesse PROTECT-CLEANER PR 90 with Carnauba wax and Hesse INTENSIVE-CLEANER PR 91 increases the useful life of the finish.

Ordering hints

Order no.:	PR 91
Container sizes	1/5 l
Ingredients specifications according to regulation (EC) no. 648/2004:	< 5 % non-ionic tensides. Contains scents, 2-methylisothiazol-3(2 H)-one, 1,2-benzisothiazol-3(2 H)-one. isopropanol
further ingredients:	Company code: 3777
Report according to WRMG:	
Product number:	2011867
Data Sheet for medical staff available under:	info@hesse-lignal.de

General advice/exclusion

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Hesse BROWN SOAP GR 1902



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

Solvent-free biodegradable soap solution for surface treatment, cleaning and care for dark soaped parquet-/wood floors or furniture surfaces. odourless, and water-dilutable.



Does not contain any hazardous substances according to annex XIV of EU-regulation 1907/2006 (REACH)

Fields of application

As cleaning- and care agent for dark or darkly soaped / leached parquet- or wood floors and furniture surfaces. Or as soap solution directly on raw wood. This way a dark, wood depending soap effect is produced.

not applicable for mirrors or marble.

Handling guidelines

Single- and multicoat application with on suitable carriers

Ground treatment: Sweep or Hoover loose dust and dirt. Remove other soilings completely.

Due to the high humidity load, the soap technology is not recommendable on moisture-sensitive carriers, e.g. beech, wood paving etc.! Also cleaning and care must be made slightly damp only! As cleaning- and care agent for dark or darkly soaped surfaces: Mix Hesse BROWN SOAP at the ratio of 2:100 (100 ml into 5 L water) with water; apply this cleaning solution evenly, but not too wet with a swab and remove in the process the dirt from the surface. Subsequently rinse the swab with clear water, wipe the surface again with cleaning solution slightly damp and allow it to dry. Do not re-wipe with clear water!

Drying

Recoatable:

Soap-treated surfaces will always be cared and cleaned with special soap cleaners only. In exceptional cases the surface may be carefully and slightly polished with a one-disk machine and white pad!

Application example

parquet, oak treated with woodfloor soap

- Pre-treatment of the carrier: Clean, professionally laid and correctly pre-treated parquet-/wooden floor with graduated sanding of the raw wood.

- Treatment: Mix Hesse BROWN SOAP at the ratio of 1:5 (1L into 5L water) with lukewarm water and wipe the wooden floor in direction of the grains with a gently wrung out swab. Subsequently allow the surface to dry. If required, repeat this procedure 1-3 times. Do not wipe with clear water!

Subsequently, if required, the surface can be polished slightly with a one-disc machine with white, non-abrasive pad. This will additionally compact the surface.

Technical data

Delivery Condition:	liquid
Shade:	red-brownish
Supply viscosity:	14 - 31 s / DIN EN ISO 2431-3mm
Non-volatile components:	14 %
Density:	1,02 kg/l at 20°C
Storage stability:	1 year in the closed original container
Storage temperature:	10 - 40 °C
Please note actual Safety Data Sheet!	

Application method

Wipe misty-moist! Do not rinse with clear water. If required, the dry surface may be slightly polished with a white, non-abrasive pad. Since the final colour tone is formed by the chemical reaction between the soap solution and the wood ingredients, it will slightly change after any new application of lye. The developed colour tone is not colourstable.

Special advice

Attention! A parquet surface, which is treated with soap only, has a low chemical and mechanical resistance and must be regularly cleaned and refreshed! Keep in a locked place out of reach of children! Only bring completely empty containers to the recycling centre/collection site.

General guidelines for handling

Test on original surface before application! Hints for cleaning and care: Please observe the care instruction according to DIN 18356. Wipe parquet with soft cloths slightly damp only, not wet. Please only use cleaning agents, which are neutral and do not contain any silicone, ammonium chloride and abrasives. Regular cleaning and care with Hesse BROWN SOAP GR 1902 will increase the life-span of the parquet surface.

Hesse BROWN SOAP GR 1902



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

Ordering hints

Order no.:	GR 1902
Container sizes	1/5 l
Ingredients specifications according to regulation (EC) no. 648/2004:	anionic surfactants (5-15%); scents, Benzisothiazolinone, Methylisothiazolone
Data Sheet for medical staff available under:	info@hesse-lignal.de
Giscode:	GE10
pH-value:	10

General advice/exclusion

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Hesse WHITE SOAP GR 1900-0700



Solvent-free, biodegradable cleaning solution for surface treatment, cleaning and care of light parquet-/wood floors or furniture surfaces. Odourless, pigmented, and water-dilutable.



Does not contain any hazardous substances according to annex XIV of EU-regulation 1907/2006 (REACH)

Fields of application

As cleaning- and care agent for white or light parquet- and wood floors and furniture surfaces. If applied directly on raw wood, you will produce a light, wood-dependent soap effect; not suitable for mirrors, marble or non-slip surfaces.

Handling guidelines

single- and multicoat application with on suitable carriers Ground treatment: Sweep or Hoover loose dust and dirt. Remove other soiling completely. Due to the high humidity load, the soap technology is not recommendable on moisture-sensitive carriers, e.g. beech, wood paving etc.! Also cleaning and care must be made slightly damp only! As cleaning- and care agent for light soaped or oiled surfaces: Mix Hesse WHITE SOAP at the ratio of 2:100 (100 ml into 5 L water) with water; apply this cleaning solution evenly, but not too wet with a swab and remove in the process the dirt from the surface. Subsequently rinse the swab with clear water, wipe the surface again with cleaning solution slightly damp and allow it to dry. Do not re-wipe with clear water!

Drying

Recoatable: Soap-treated surfaces will always be cared and cleaned with special soap cleaners only. In exceptional cases the surface may be carefully and slightly polished with a one-disk machine and white pad!

Application example

parquet, fir „Scandinavian effect“

- Pre-treatment of the carrier: Clean, professionally laid and correctly pre-treated parquet-/wooden floor with graduated sanding off the raw wood.
- Treatment: Mix Hesse WHITE SOAP at the ratio of 1:5 (1L into 5L water) with lukewarm water and wipe the wooden floor in direction of the grains with a gently wrung out swab. Subsequently allow the surface to dry. If required, repeat this procedure 1-3 times. Do not wipe with clear water! Subsequently, if required, the surface can be polished slightly with a one-disc machine with white, non-abrasive pad. This will additionally compact the surface.

Technical data

Delivery Condition:	liquid
Shade:	whitish
Supply viscosity:	38 - 58 s / DIN 4 mm/20 °C
Non-volatile components:	7 %
Density:	1,02 kg/l at 20 °C
Storage stability:	1 year in the closed original container
Storage temperature:	10 - 40 °C
Please note actual Safety Data Sheet!	

Application method

Wipe misty-moist! Do not rinse with clear water. If required, the dry surface may be slightly polished with a white, non-abrasive pad.

Special advice

Attention! A parquet surface, which is treated with soap only, has a low chemical and mechanical resistance and must be regularly cleaned and refreshed! Keep in a locked place out of reach of children! Only bring completely empty containers to the recycling centre/collection site.

General guidelines for handling

Test on original surface before application! Hints for cleaning and care: Please observe the care instruction according to DIN 18356. Wipe parquet with soft cloths slightly damp only, not wet. Please only use cleaning agents, which are neutral and do not contain any silicone, ammonium chloride and abrasives. Regular cleaning and care with Hesse WHITE SOAP GR 1900-0700 will increase the lifespan of the parquet surface.

Ordering hints

Order no.:	GR 1900-0700
Container sizes	1/5 l
pH-value:	7,5
Ingredients specifications according to regulation (EC) no. 648/2004:	Pigment White 6; Carnauba wax, anionic surfactants (unter 5%); perfume oil, Benzisothiazolinone, Methylisothiazolone
Data Sheet for medical staff available under:	info@hesse-lignal.de
Giscode:	GE10

Hesse WHITE SOAP GR 1900-0700



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

General advice/exclusion

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Hesse REMOVER OS 5600



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

is a highly effective, water based cleaning concentrate for removal of old coats of care products on varnished parquet and wooden floors.



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds

Fields of application

Removes residues of Hesse Aqua-Refresher, Protect-Cleaner and similar care products, as well as stubborn dirt and footprints.

Handling guidelines

Single-coat application

Ground treatment: Remove loose dirt by vacuum cleaner or fine broom.

Hesse Remover OS 5600 must be diluted with water according to the degree of pollution and the surface to be cleaned is wiped evenly moist with a swab, dust mop or similar. Base cleaning: approx. 1 liter Hesse Remover OS 5600 into 5 liters of mopping water. Wipe the floor evenly moist with this cleaning solution and let it react for about 5 minutes. Application quantity and reaction time mustn't be too high, so that the wood does not swell! Subsequently, wipe the surface with clear water in order to remove detached coats and possible rests of remover. Please make sure that the surface is not wiped too wet! After full drying of the residue-free cleaned surface, a new maintenance procedure or another suitable surface treatment is required!

Drying

Dependent on the climatical conditions. The surface must be absolutely dry before further treatment with care products or with coordinated surface treatment products; Recommendation: preferably over night at approx. 20 °C.

Following treatment:

After full drying of the residue-free cleaned surface, a new maintenance procedure or another suitable surface treatment is required!

Technical data

Delivery Condition: liquid
Shade: blue
Supply viscosity: 11 s / DIN 4 mm/20 °C
Density: 1,01 kg/l at 20 °C
Storage stability: 1 year in the closed original container
Storage temperature: 10 - 40 °C
Please note actual Safety Data Sheet!

Application method

Apply the material evenly on the floor with a suitable swab, dust mop or similar. Alternatively, after applying the cleaning solution with appropriate exposure, you can also work with a Monodisc with a white pad to loosen the dirt. Then again the floor must be cleaned with clear water to remove the dirt completely! To remove larger

quantities of residues of care products or other soilings this process can be repeated, if necessary! Warning: too much water and / or too long exposure time may cause swelling of wood and may damage the wood! That's why this shall be carried out preferably by qualified personnel! Residues of the Remover on the surface have influence on the adhesion of subsequent care products!

Special advice

Highly effective water based cleaning concentrate for removal of old coats of care products on varnished parquet and wooden floors. Removes residues of Hesse Aqua-Refresher, Protect-Cleaner and similar care products, as well as stubborn dirt and foot. In case of larger surfaces, it is useful to separate into sections! The suitability of the substrate for the use of Hesse Remover OS 5600 should be checked at one point first before full-scale application! This is also applicable for the cleaning effect against certain soilings! Experience has shown that spots, which already penetrated into the present coating or even already in the wood, cannot be removed without residue by a subsequent cleaning and maintenance!

Ordering hints

Order no.:	OS 5600
Container sizes	1/25 l
Giscode:	GE20
pH-value:	10
	Please dispose completely empty containers only.
	Keep locked and out of the reach of children!

General advice/exclusion

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Hesse AQUA-REFRESHER OE 5670

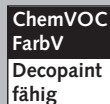


Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

is an environment-sparing care agent for highly loaded surfaces. which were produced with Hesse Parquet-Hydro finishes, UV-, Oil-, Oil-UV and Oxi-Oil systems. The surface is refurbished by application of Hesse AQUA-REFRESHER. Scratchy and dull surfaces become attractive again and the further fading is retarded.



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds



Product fulfills the specifications of the Directive on Dyes and Lacquers containing solvents: ChemVOC FarbV- from 23.12.2004 (Decopaint guideline)

Fields of application

For panel- and floor coating; not suitable for mirrors, marble or non-slip surfaces.

Handling guidelines

Single-coat application

Ground treatment: Remove loose dirt by vacuum cleaner or fine broom. For base cleaning of water-soluble pollutions add Hesse INTENSIVE-CLEANER PR 91 into the cleaning water and clean the floor. Subsequently wipe the surface and allow it to dry properly. Remove extreme pollutions with Hesse Remover OS 5600. Allow the surface to dry sufficiently! The material should be diluted 1:1 with water before use! The concentration of the material depends on the severity of wear marks on the parquet surface and can be adjusted accordingly! The more affected the surface is, the higher should be the concentration of AQUA-REFRESHER! The last application should be made in vegetation/grain direction!

Drying

Accessibility:

after 2 h. 20 °C

Full load capacity: after 24 h. 20 °C

Gloss level

semi gloss

Technical data

Delivery Condition: liquid
Shade: whitish
Supply viscosity: 11 s / DIN 4 mm/20 °C
Density: 1,01 kg/l at 20°C
Storage stability: 1 year in the closed original container
Storage temperature: 10 - 40 °C
Please note actual Safety Data Sheet!

Application method

Apply the material evenly on the floor with a suitable swab, dust mop or similar.

Special advice

For varnishing of old and unattractive surfaces; defers the new wear and tear. In case of larger surfaces, it is useful to separate into sections! The desired gloss is formed automatically. Do not wipe into already dried sections; Danger of streaks building! Avoid draught and dust raising in humid condition! Existing coating components especially on older surfaces or on prefinished wood parquet can possibly cause bonding problems of the care product! For this reason, always make a test surface and assess, if the result meets your requirements! Please test adhesion in the entire construction! In regular intervals, it is required to remove old AQUA-REFRESHER rests from the surface with Hesse Remover OS 5600. This way, building of a sticky-greasy surface caused by too frequent application of AQUA-REFRESHER will be avoided!

Ordering hints

Order no.: OE 5670
Container sizes 1/25 l
Giscode: W2+

Keep locked and out of the reach of children!
Please dispose completely empty containers only.

General advice/exclusion

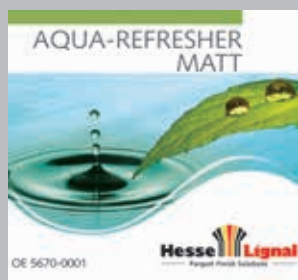
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Hesse AQUA-REFRESHER MAT OE 5670-0001



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

is an environment-sparing care agent for highly loaded surfaces. which were produced with Hesse Parquet-Hydro finishes, UV-, Oil-, Oil-UV and Oxi-Oil systems. The surface will be mat refreshed by using Hesse AQUA-REFRESHER. Scratchy and dull surfaces become attractive again and the further fading is retarded.



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds



Product fulfills the specifications of the Directive on Dyes and Lacquers containing solvents: ChemVOC FarbV- from 23.12.2004 (Decopaint guideline)

Fields of application

For panel- and floor coating; not suitable for mirrors, marble or non-slip surfaces.

Handling guidelines

Single-coat application

Ground treatment: Remove loose dirt by vacuum cleaner or fine broom. For base cleaning of water-soluble pollutions add Hesse INTENSIVE-CLEANER PR 91 into the cleaning water and clean the floor. Subsequently wipe the surface and allow it to dry properly. Remove extreme pollutions with Hesse Remover OS 5600. Allow the surface to dry sufficiently! The material should be diluted 1:1 with water before use! The concentration of the material depends on the severity of wear marks on the parquet surface and can be adjusted accordingly! The more affected the surface is, the higher should be the concentration of AQUA-REFRESHER! The last application should be made in vegetation/grain direction!

Drying

Accessibility:

after 2 h. 20 °C

Full load capacity: after 24 h. 20 °C

Gloss level

mat

Technical data

Delivery Condition: liquid
Shade: whitish
Supply viscosity: 11 s / DIN 4 mm/20 °C
Density: 1,01 kg/l at 20 °C
Storage stability: 1 year in the closed original container
Storage temperature: 10 - 40 °C
Please note actual Safety Data Sheet!

Application method

Apply the material evenly on the floor with a suitable swab, dust mop or similar.

Special advice

For varnishing of old and unattractive surfaces; defers the new wear and tear.

In case of larger surfaces, it is useful to separate into sections! The desired gloss is formed automatically. Do not wipe into already dried sections; Danger of streaks building! Avoid draught and dust raising in humid condition! Existing coating components especially on older surfaces or on prefinished wood parquet can possibly cause bonding problems of the care product! For this reason, always make a test surface and assess, if the result meets your requirements! Please test adhesion in the entire construction! In regular intervals, it is required to remove old AQUA-REFRESHER rests from the surface with Hesse Remover OS 5600. This way, building of a sticky-greasy surface caused by too frequent application of AQUA-REFRESHER will be avoided!

Ordering hints

Order no.:	OE 5670-0001
Container sizes	1/25 l
Giscode:	W2+
	Keep locked and out of the reach of children!
	Please dispose completely empty containers only.

General advice/exclusion

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Application – maintenance products



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

Parquet structure							
	Sealed		Oiled (and waxed)			Soaped	
Maintenace product	Small - medium stress	high - highest stress	Natural oil e.g. GE 11254	Synthetic resin oil e.g. OE 82/OE 83	Finished parquet	Light	Dark
PROTECT-CLEANER PR 90	E U	E U	E U	E U	E U		
INTENSIVE-CLEANER PR 91	G	G	G	G	G	-	-
REMOVER OS 5600		G; 1			G; 1		
AQUA-REFRESHER OE 5670	A	A			A		
AQUA-REFRESHER MAT OE 5670-0001	A	A			A		
PROTECT-OIL OE 88-2				A R			
NATURAL-SOLID-OIL GE 11254			A R				
BROWN-SOAP GR 1902							E U G A R
WHITE-SOAP GR 1900-0700						E U G A R	

E: Initial care

U: Maintenance care

G: Thorough cleaning

A: Refresh

R: Repair (Beforehand, carry out repair test on a less visible place!)

1: Make sure in advance, on a less conspicuous place, that the remover does not damage the existing coating!



Cleaning and care instructions for sealed parquet surfaces; according to DIN 18356



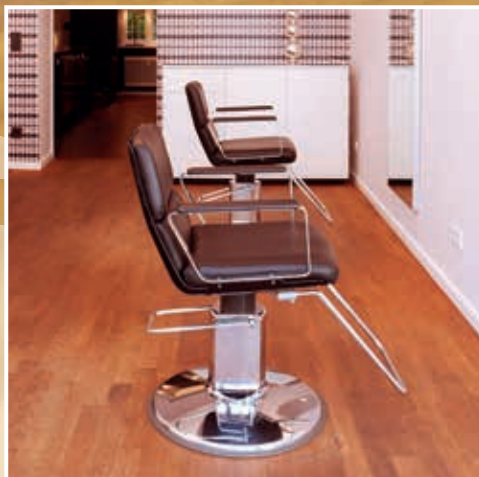
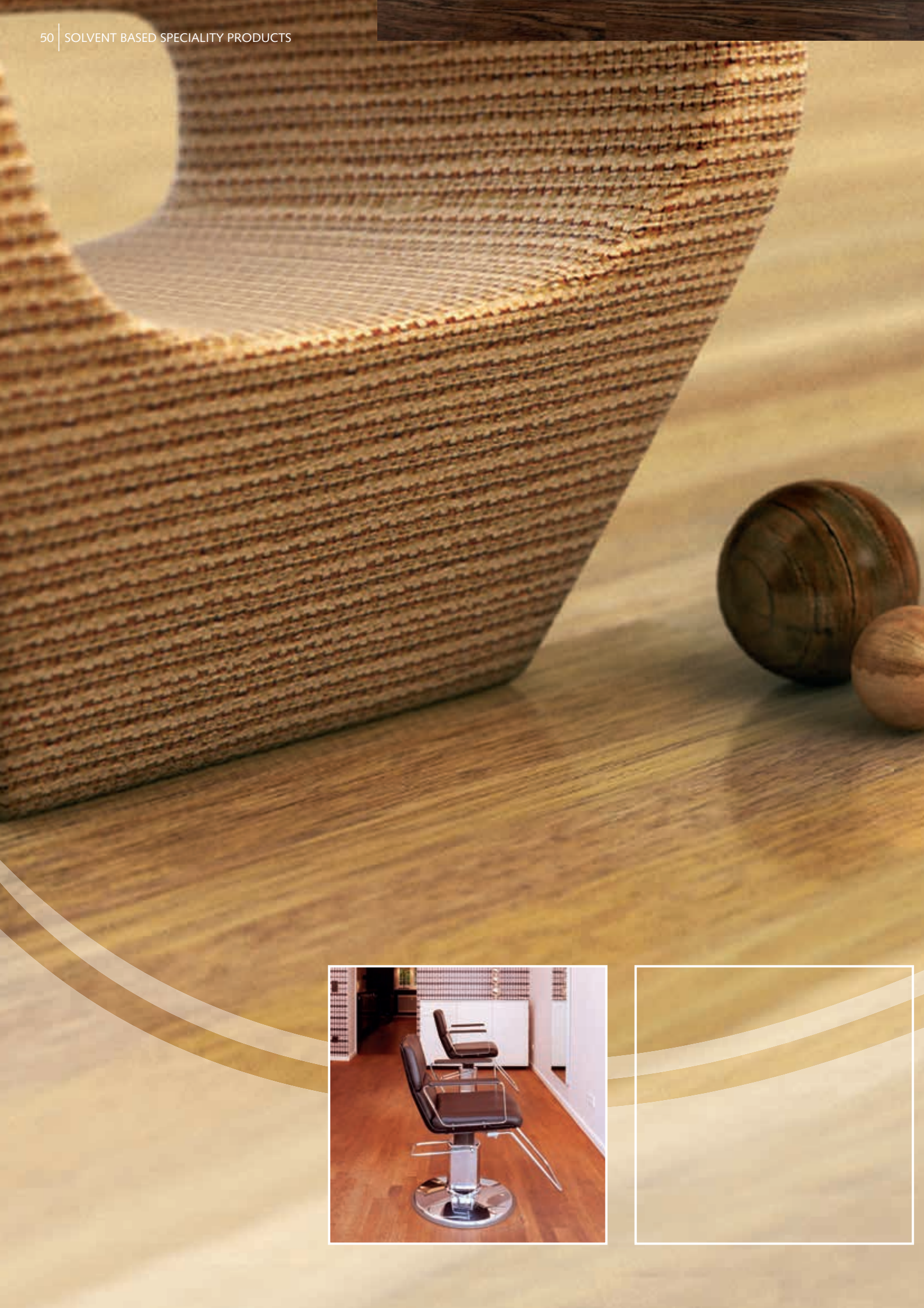
Cleaning and care instructions for oiled parquet surfaces; according to DIN 18356



Cleaning and care instructions for industrial oiled parquet surfaces; according to DIN 18356

As is well known cleaning and maintenance intervals are determined by the type and intensity of use.

Stress:	Maintenance Care	Thorough cleaning	Refresh/Repair
low stress: Private bedrooms and living rooms	Depending on stress: Every 1 – 2 months	Depending on stress: Based on experience 1x in year	Refresh preferably after each thorough cleaning; Repair when needed
Medium stress: Corridors, stairs, offices etc.	Depending on stress: 1 – 2x a month	Depending on stress: 2 – 3 x a year	Refresh after each basic cleaning, and if necessary; Repair when needed
High stress: Schools, restaurants, public areas, lounges	Depending on stress: At least 1 x each week	Depending on stress: 3 – 4 x a year	Refresh after each basic cleaning, and if necessary; Repair when needed



Solvent based speciality products

For certain specialist applications the products in use are not always replaceable with solvent free alternatives. Due to national and European regulations, these products may not be used on site in Germany and the EU for parquet coating.

In recognition of this please note the information provided in the TRGS 617 regulation! This explains the possibilities for substitution regarding solvent containing products used for parquet and other wooden floors.

The valid national regulations currently in force must be observed.



Hesse Solvent-WOOD-FILL NS 15



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

which results, after mixing it with sanding dust, in a high-quality, elastic and well-filling gap filler.



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds



aromates-free

Fields of application

for parquet and wooden floors for filling parquet gaps up to 3 mm wide and filling smaller imperfections. Not suitable for applications within the scope of ChemVOCFarbV or under EC-Guideline 2004/42/EEC (Decopaint).

Handling guidelines

Single-coat application with 50 -80 g/m² on professionally laid wood flooring. The floor must be sanded thoroughly down to the wood, dry and free from oil, fat, wax, silicones and sanding dust. Ground treatment: Final sanding of wood floor with grain size 100/ dust removal. Hesse Solvent-WOOD-FILL Shake well before use. Mix with very fine sanding dust (K80) to get a trowelable texture. Sanding dust from the edges is particularly well suited. The finer the sanding dust, the better the adhesion in the joints. Intermediate sanding roll sanding machine grain size 100 - 120, single disk sander grain size 120 - 150. No gap putty residues must remain on the surface (danger of spot formation).

Drying

With good ventilation and max. humidity of 0% Sandability: after 30 - 60 min 20 °C for 1mm gaps, for 2mm gaps drying over night. Subsequent treatment with all products from the Hesse parquet range (PUR-, Hydro lacquers and oils).

Application example

- Mosaic-style parquet, oak with flaws
- Wood-sanding - grain size 100
- Mixing:
 - Hesse Solvent-WOOD-FILL with clean oak-sanding dust, grain 100
- Puttying: 1 x on the entire surface Hesse Solvent-WOOD-FILL Mixture with clean oak-sanding dust, grain 100
- Intermediate drying 30 - 60 min 20 °C
- Plane sanding grain size 100 - 150 except for the raw wood
- Coating 1 x 100 - 120 g/m²
 - Hesse PRIMER PLUS with a suitable roller
- Drying for at least 2 - 3 h 20 °C

Technical data

Delivery Condition:	Liquid
Shade:	colourless
Supply viscosity:	60 - 80 s / DIN 4 mm/20 °C
Non-volatile components:	11 - 13 %
Density:	0,86 kg/l at 20 °C
Storage stability:	1 year in the closed original container
Storage temperature:	appr. 10 - 30 °C

Further information on storage: Accidentally frozen material can be re-used following thawing and heating to 20 °C, without loss of effectiveness. Please note actual Safety Data Sheet!

Application method

Manual puttying: With stainless-steel putty knife (the contact with oxidating metals lead to discolouration of the material and the puttied surfaces). Putty the complete parquet surface to be treated; pre-fill wide gaps or putty twice. Remove dried lacquer residues with Cleaning Agent DV 9

Special advice

To minimise the risk of side glueing, critical substrates such as i.e., wooden pavement, upright ribs, planed floor boards, parquet on underfloor heatings etc. require a proper pre-treatment with Primer HG 21, Primer Plus HG 22, Primer Ultra HG 24 oder Spezial-Grundierung ZD 4540

General guidelines for handling

Of NC-materials: Please perform test lacquering under practical conditions. Therefore, as a rule, we recommend to make a test coating to evaluate the colour effect, adhesion and the drying process under practical conditions.

Ordering hints

Order no.:	NS 15
Container sizes	5 x 5 l
Productivity per litre	10 - 20 m ²
Thinner	NS 15
Hesse	DV 9
CLEANING-AGENT	for removing dried lacquer residues
Giscode:	G 3

General advice/exclusion

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Hesse Special Base coat ZD 4540



Special one-component Primer, aromates-free, especially transparent, brilliant-glossy drying, clear with especially good bonding to critical substrates. Primer for parquet and wooden floors.



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds
Fulfils DIN EN 71-3:2002-11 (safety of children's toys)

Fields of application

For parquet coating. Not suitable for applications within the scope of ChemVOCFarbV or under EC-Guideline 2004/42/EEC (Decopaint).

Handling guidelines

Single-coat application with 80 -120 g/m² on a prepared substrate. Ground treatment: Proper sanding of the suitable substrate

Drying

Depends on application amount, as well as lacquer and ambient temperature. Recoatable: appr. 30 - 45 min 20 °C
Recoatable: with Hesse HYDRO parquet lacquers

Application example

- Base - coat 1 x 100 g/m²
Hesse Special Base coat ZD 4540
- Intermediate drying 1-3 h 20 °C
- Coating 2 x 100 - 120 g/m²
Hesse PURA-ONE HDE 51-4
Mixture 10 : 1 HYDRO-PUR Hardener HDR 71
- Intermediate drying appr. 6 h 20 °C
- Complete drying > 16 h 20°C
- Full load capacity > 5 d 20°C
better after one week

Technical data

Delivery Condition: Liquid
Shade: colourless
Supply viscosity: 45 - 55 s / DIN 4 mm/20 °C
Non-volatile components: 9 - 11 %
Density: 0,84 kg/l at 20 °C
Flashpoint: < 21°C
Storage stability: 1 year in the closed original container
Storage temperature: 16 - 25 °C
Storage class according to the Occupation Safety Ordinance: Flammable.
Please note actual Safety Data Sheet!

Application method

Brush/Roll

Special advice

Please test adhesion in the entire construction!

General guidelines for handling

Of NC-materials:
Please perform test lacquering under practical conditions. Wood quality, sanding and working technique influence the quality of the surface. The working proposals are based on state-of-the-art processing technology. Our statements should be regarded as recommendation and require a thorough examination with regard to their conversion in any case.

Ordering hints

Order no.:	ZD 4540
Container sizes	5 x 5 l
Productivity per litre	10 - 12 m ²
Retarder	DV 9 - add max. 5 %
Cleaning thinner	DV 9
Giscode:	G 1

General advice/exclusion

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Hesse 1C-PU Finish DE 41 -x(degree of gloss)



One-component PU Finish, which, by reaction with humidity, hardens to a highly resistant shield, especially well filling, highly abrasion-resistant and hard-wearing. Multicoat lacquer for priming- and top coating with very good resistance to chemical and mechanical strain.



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds

Fulfils DIN EN 71-3:2002-11 (safety of children's toys)



DIN 68861, part, 1B
DIN 53160 Part 1 and Part 2 (resistance against saliva and sweat simulation); No discolouration (Level 5)
PVC-resistant

Fields of application

In the entire interior decoration.
Not suitable for applications within the scope of ChemVOCFarbV or under EC-Guideline 2004/42/EEC (Decopaint).

Handling guidelines

Two- to triple-coat application with 100 - 120 g/m² on suitable carriers, max. total moist application amount: 300 g/m².
Ground treatment: Graduated raw-wood sanding grain size 120 - 150/ dust removal. Intermediate sanding grain size 220/ dust removal.
Seal any opened containers air-tight immediately after removing material, since the contents react to humidity and will condense. Place the container upside-down for a short time. Immediately clean all implements!

Drying

Dependent on application amount, material and ambient temperature, application method and substrate material.
Sandable and recoatable: after 2 - 3 h 20 °C
Complete hardening after 7 d 20 °C
Recoatable: following drying and initial sanding, only with material from the same series.

Application example

In each case, the application method and the exact application parameters are adjusted to the application- and drying conditions. They can be learned from the customer's specific process descriptions.

Gloss level

08-12 Gloss/125 µm	mat
18-22 Gloss/125 µm	semi mat
28-32 Gloss/125 µm	silky gloss
62-68 Gloss/125 µm	gloss
	DIN 67530/ 60°
	application on photo cardboard

Technical data

Delivery Condition:	Liquid
Shade:	colourless
Supply viscosity:	22 - 24 s / DIN 4 mm/20 °C
Non-volatile components:	38 - 41 %
Density:	0,98 - 1,0 kg/l at 20 °C
Flashpoint:	> 21 °C
Storage stability:	3 months in closed original can
Storage temperature:	16 - 25 °C
Storage class according to the Occupation Safety Ordinance:	Flammable.
Please note actual Safety Data Sheet!	

Application method

Spraying:	
Working visc.:	20 - 24 s / DIN 4 mm/20 °C
Air spraying (cup gun)	
Spray nozzle size:	1,8 - 2 mm
Spray pressure:	2,5 - 3,5 bar
Airless spraying	
Spray nozzle size:	0,23 - 0,28 mm
Spray pressure:	100 - 120 bar
Airless, air-assisted	
Spray nozzle size:	0,23 - 0,28 mm
Spray pressure:	60 - 100 bar
Atomizing pressure:	1 - 2 bar

Brush/Roll with lint-free rollers, i.e. of shorthair mohair. During the first use, remove loose hairs with adhesive tape.
Rapid rolling prevents stop lines; work in the direction of the wood grain.

Special advice

Do not use product on light woods or those treated with wood-foreign stains!
Do not use on bleached substrates!

General guidelines for handling

Of PUR materials:
PUR-lacquers should not be dried and processed at room temperature below 18 °C and 40% relative air humidity. Ideal values are 20 - 25 °C, 50 - 65% relative air humidity. Variations lead to drying and curing problems. Please make a test coating under practical working conditions!

Hesse 1C-PU Finish DE 41 -x(degree of gloss)



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

Ordering hints

mat	DE 41-2
semi mat	DE 41-4
silky gloss	DE 41-6
glossy	DE 41-8
Container sizes	5 l
Productivity per litre	7 - 8 m ²
Cleaning thinner	DV 4994

General advice/exclusion

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Hesse PUR-Multicoat lacquer DE 4532 x(degree of gloss)



Mixture ratio: 10 : 1
with PUR-Hardener DR 4071

Two-component PUR-acrylic resin lacquer, light-fast, well filling, clear. Multicoat lacquer for priming- and top coating with high resistances, especially to mechanical strain. Product can be used on bleached wood. Free from phthalate softeners, therefore also applicable for the coating of children's toys and baby accessories.



Formulation free of: wood preservatives, toxic heavy metals, formaldehyde, phthalate-based plasticizers, CMR materials (Classes 1 + 2), volatile halogen-organic compounds

Fulfils DIN EN 71-3:2002-11 (safety of children's toys)



DIN 68861, part, 1B
DIN 53160 Part 1 and Part 2 (resistance against saliva and sweat simulation); No discolouration (Level 5)
PVC-resistant

Fields of application

In the entire interior decoration also for brushing and rolling. After dilution, also applicable for MDF edge insulation. Not suitable for applications within the scope of ChemVOCFarbV or under EC-Guideline 2004/42/EEC (Decopaint).

Handling guidelines

Single- to double-coat application with 100 -150 g/m² on suitable carriers, max. total moist application amount: 300 g/m². Ground treatment: Graduated raw-wood sanding grain size 120 - 180/ dust removal. Intermediate sanding grain size 220 - 320/ dust removal. Mixture 5 : 1 with PUR-Hardener DR 4070 for extreme wear and critical substrates. Mixture 5 : 1 with PUR-Hardener DR 4070 for coating of Wengé, addition of 30% thinner required.

Handling interval

1 Working day at 20 °C

Pot life

1 Working day at 20 °C

Drying

Dependent on application amount, material and ambient temperature, application method and substrate material.

Forced drying possible up to 50 °C

Sandability: after 4 - 5 h

Recoatable:

Following sufficient drying and interim sanding with almost all PUR lacquers.

Application example

Table, beech natural, mat

- Wood-sanding grain - size 120 - 180

- Coating 2 x 100 - 150 g/m²

Hesse PUR-Multicoat lacquer DE 45324

Mixture 10 : 1 PUR-Hardener DR 4071

- Intermediate drying for at least 4 h 20 °C rather 16 h 20 °C

- Intermediate sanding grain size 280 - 320

- packable after drying for at least 16 h 20 °C

Gloss level

00-02 Gloss/125 µm	dull mat
08-12 Gloss/125 µm	mat
18-22 Gloss/125 µm	semi mat
47-53 Gloss/125 µm	silky gloss

DIN 67530/ 60°
application on photo cardboard

Technical data

Delivery Condition:	Liquid
Shade:	colourless
Supply viscosity:	33 - 35 s / DIN 4 mm/20 °C
Non-volatile components:	24 - 26 %
Density:	0,942 - 0,947 kg/l at 20 °C
Flashpoint:	> 21 °C
Storage stability:	1 year in the closed original container
Storage temperature:	16 - 25 °C
Storage class according to the Occupation Safety Ordinance:	Flammable.

Please note actual Safety Data Sheet!

Application method

Spraying:
if necessary, add thinner;

Air spraying (cup gun)

Spray nozzle size:	1,8 - 2 mm
Spray pressure:	2,5 - 3,5 bar

Airless spraying

Spray nozzle size:	0,23 - 0,28 mm
Spray pressure:	100 - 150 bar

Airless, air-assisted

Spray nozzle size:	0,23 - 0,28 mm
Spray pressure:	60 - 100 bar
Atomizing pressure:	1,5 - 2,5 bar

Brush/Roll applicable
with addition of 5 - 10% DV 4909

Special advice

Do not use dull mat adjustment as multicoat lacquer, but as non-recurring top coat, only!
Hint for application as MDF-edges isolation under coloured lacquer systems: Process mixture with 20-30% of thinner DV 4900; always the same day - after prior sanding with grain 320.
Applicable for finishing PUR-Colour lacquers, results in ring resistance.

Hesse PUR-Multicoat lacquer DE 4532 x(degree of gloss)

Mixture ratio: 10 : 1 with PUR-Hardener DR 4071



Hesse GmbH & Co. KG, Warendorfer Str. 21, D 59075 Hamm
www.hesse-lignal.de

General guidelines for handling

Of PUR materials:

PUR-lacquers should not be dried and processed at room temperature below 18 °C and 40% relative air humidity. Ideal values are 20 - 25 °C, 50 - 65% relative air humidity. Variations lead to drying and curing problems. To avoid faulty bonding, please pre-sand PUR-lacquer surfaces immediately before applying lacquer and apply the top coat to the sanded surfaces as soon as possible. Only use residues from the previous day as a 10 - 20 % addition to a fresh lacquer-hardener mixture. Old lacquer-hardener mixtures interfere with the surface quality (adhesion / resistance). The final hardness of the finish is attained - with proper storage (at least 20°C room temperature) - after one week. Freshly bleached wood must dry at least for 48 hours at 20°C before coating with PUR lacquers. Please make a test coating under practical working conditions!

Ordering hints

dull mat	DE 45320
mat	DE 45322
semi mat	DE 45324
silky gloss	DE 45327
Container sizes	5/25 l
Hardener	DR 4071
Container sizes, hardener	0,1/0,5/1/2,5/5/10 l
Productivity per litre	6 - 8 m ²
Thinner	DV 4900, DV 4994
Retarder	DV 4909
	- add max. 5 - 10 %
Cleaning thinner	RV 1, ZD 82

General advice/exclusion

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Combination possibilities

Sealing								
Primer	COMMENTS	UNA-ELITE HE 31-(GG)	PURA-ONE HDE 51-(GG)	PURA-NATURA HDE 52-0	NATURAL-OIL OE 83-(GG)	RESIN-OIL OE 82-(GG)	NATURAL-SOLID-OIL GE 11254	HERKULITE HUE 8606x(GG)
WOOD-FILL HS 11		+	+	+	+	+	+	+
PARQUET COLOUR WPB	6	+	+	+	+/- (8)	+	+/- (8)	+
PRIMER HG 21		+/- (7)	+/- (7)	+				
PRIMER PLUS HG 22		+	+	+/- (5)				
PRIMER ULTRA HG 24		+	+	+/- (5)				+
PRIMER WHITE-OIL OB 84-77	1; 3		+	+				
RESIN-OIL OE 82-(GG)	1; 3		+			+		
NATURAL-OIL OE 83-(GG)	1; 3				+	+		
NATURAL-SOLID-OIL GE 11254	2; 3		+				+	
HERKULITE HUE 8606x(GG)	4		+	+/- (5)				+
OB 83-FT						+		

Comments: + recommended +/- only partly recommended

- 1 Harden oil! MV: 10:1 with OR 87; Drying overnight at room temperature before applying next layer.
- 2 Harden oil! MV: 100:4 (25:1) with OR 88; Drying overnight at room temperature before applying next layer.
- 3 If intermediate drying longer than 16 hours, slight sanding required!
- 4 Good sanding required!
- 5 Recommended to a limited extent because the „natural wood“ effect is weakened!
- 6 The subsequent surface treatment influences the final colour; Stains must be sufficiently dry before the next processing step is carried out!
- 7 Test application on the original base under practical conditions necessary!
- 8 Combined application of stain and oil need particularly intensive care! The number of applied layers of oil significantly determines the resilience of the parquet surface!
- 9 Following this do not treat white or light colours with colourless oil.
- 10 Fill and pad in residue.

**ChemVOC
FarbV**

**Decopaint
fähig**

**Regulation:
ATV/DIN
18356**

„Decopaint Regulation“ – ChemVOCFarbV

The solvent-based colours and lacquers regulation (Chem-VOCFarbV) - better known as Deco Paint Directive - is the implementation of the EU Deco Paint Directive 2004/42/EG in German law and applies under the VOC regulation (solvent consumption max. 5 t/a in Germany). It concerns the coating of components such as windows, doors, floors, stairs, wall and ceiling coverings. Furniture is excluded from the Deco Paint regulation.

As of 1st January 2007 lacquer manufacturers are only allowed to bring products into the marketplace that conform to the Deco Paint directive, and that do not exceed the stated maximum VOC contents (VOC = organic solvents). These limits apply to the mixed product, i.e. including the necessary hardener, thinner and additives.

Since 2007 all materials conforming to „Deco Paint“ must have the specific manufacturer information on the product label. The label must contain information about the valid VOC limit values of each product category, the actual maximum VOC content of the ready-for-use product and the underlying product category in a horizontal and readable explanation.

The Deco Paint Directive applies in Germany and All Member States of the EU!

ATV/DIN 18356: Parquet Work (ATV: General Technical Terms and Conditions for Construction Work)

This applies to the fitting of parquet flooring and not the actual surface treatment of the wood. of particular importance is the very often neglected Part 3.1.4, which states that “The contractor has to pass on written care instructions to the client...”

Failure to comply with this rule may lead to severe consequences for the parquet layer!



Technical Regulations for Hazardous Substances TRGS 617

DIBt

Due to the importance of health and safety to consumers and manufacturers the German Institute for Building Technology (DIBt) demands that all parquet and wooden flooring is subject to DIN EN 14342-, which states that all newly installed parquet flooring must be assessed by an independent building inspectorate. Consequently, as from 2011 only parquet that bears official approval by DIBt may be used.

The focus is on the emission of harmful chemicals from the products, in short, VOC (Volatile Organic Compounds). In addition, the formulations of all materials used are disclosed and the health aspects evaluated by DIBt. Renovation of existing floors is not effected.

DIBt approved coating materials are labelled with the U-mark, approval number and the words, "emission tested building product according to DIBt principles".

With this approval the DIBt grants the coveted authorisation stating positive test results from the required accredited testing institutes. The fundamental fire behaviour and the residual emissions at different drying times is also tested.

Unfortunately, this whole admission process is very time consuming and rarely predictable for the client. It is not uncommon to wait up to and over a year between the application and the presentation of the final certification!

Therefore, we can not give a specific approval number for certain products yet.

Technical Regulations for Hazardous Substances TRGS 617

(Substitutions for strong solvent-based treatment agents for parquet and other wood flooring)

The Technical Regulations for Hazardous Substances (TRGS) reflect the current level of understanding in occupational medicine, hygiene and other ergonomic findings regarding the use of hazardous substances (including their classification and labelling).

These regulations explain the benefits of substituting solvent-based surface treatment products for the more health and safety conscience alternatives for use with parquet and other wood flooring.

The objective of the substitution is to eliminate or to reduce the risk involved in working with hazardous substances. This is vital measure to protect people working with hazardous substances.

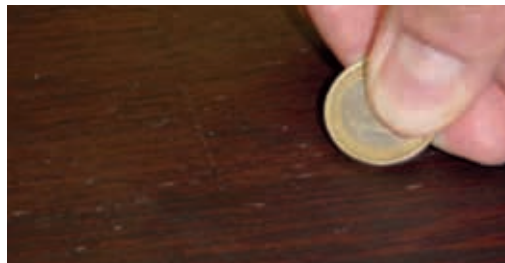
Please see TRGS 617 if for technical reasons strong solvent-based products are used!

Typical parquet tests:

Compound (adhesion to base)

These tests will determine whether the coating structure has bonded well to the base. In addition, it can be assessed with coatings of more layers, whether the individual layers have sufficiently bonded.

This feature can be evaluated by various methods: For the pragmatist, the coin-test has been tried and tested:

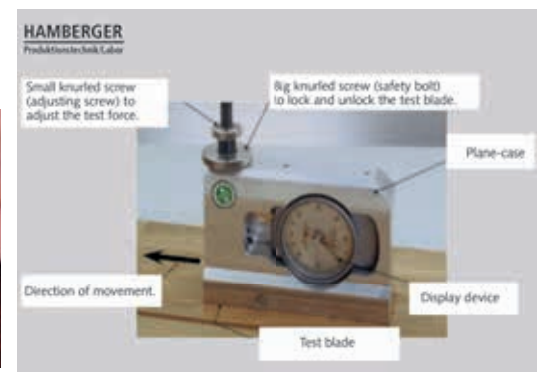


Since this method is very subjective and has many non-standard influencing factors, experience shows that it is only significant for comparative tests and only with sufficient practice. Here a coin with sharp-edges is pressed firmly onto the surface to be tested, drawn across the surface at a steady speed with the most possible uniform pressure.

A bad bonding shows significant damage to the surface, coupled with a „white“ scratch mark (whitening). The lower the visible damage the better the bond and the resiliency of the structure.

Hamberger wood plane: (Application mainly used for testing industrial parquet)

The company Hamberger Industrierwerke has based their test instrument on the principle of the coin-test.



However, the so-called Hamberger plane can be tested under defined conditions. As a result, the force is given in Newtons (N), in which no whitening is visible.

Cross-Cut (according to DIN EN ISO 2409)





Another common method is the cross-cut test. In this test, the surface is cut into in a cross-shape at an angle of 90 ° with a special (multi-cutter) blade. A tape then is glued on to the cut area, pressed and then quickly and evenly pulled off.



The surface is subsequently assessed.



Typical parquet tests:

Cross-cut value	Description	Appearance of the surface in the cross-cut area where the flaking is * (example for each 6 parallel cuts)
0	The cut edges are completely smooth; none of the squares of the grid is chipped.	—
1	Small pieces of the coating have splintered off at the connections of the grid lines. Splintered area is essentially not greater than 5 % of the cross-cut area	
2	The coating has splintered along the cut edges and/or the connections of the grid. Splintered areas significantly greater than 5%, but not significantly greater than 15% of the cross-cut area.	
3	The coating has partially or completely splintered along the cut edges in wide strips and/or some squares have partially or completely splintered off. A cross-cut area is affected significantly larger than 15 %, but not significantly greater than 35 %.	
4	The coating has splintered along the cut edges in broad strips and/or some squares have partially or completely splintered off. A cross-cut area is affected significantly greater than 35 %, but not significantly greater than 65 %	
5	Every splintering which cannot be classified as cross-cut value 4.	—

* Images are examples of a cross-cut within the parameter level. The percentages are based on the visual impression conveyed by the images and the same percentages are not necessarily reproduced by digital image analysis.

Abrasion: Taber Test

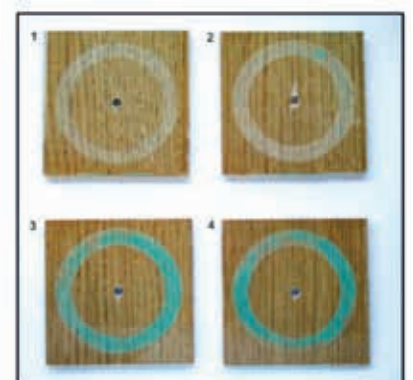
Here the resistance of a surface to wear is checked. The „Taber Abraser“ is used for these somewhat different tests:

The test surface is clamped on a rotary plate. Subsequently, two friction wheels are mounted on the surface. These friction wheels can be of different hardness, consist of various materials and / or with equipped with different abrasive materials (different sandpaper discs, leather, rubber grinding rolls etc). When the Taber has been adjusted to the required parameters the rotary plate is set in motion.

Depending on the test method will either...

- the quantitative removal after a certain number of revolutions or
- the number of revolutions are specified up to a certain degree of damage to the undercoat

For special tests, the conditions can be intensified by additional scattering of defined sand. (falling sand test). In the results the test parameters and / or the exact test method must be specified in order to allow the applicable interpretation. In addition, the thickness of the coating has, of course a serious impact on the results!



Typical parquet tests:

Resiliency

Ball drop test:
Tested with the so-called impact loading test device according to Wegner; A metal ball with a designated spring force is „shot“ on the test surface. It leaves an impression obvious, to a greater or lesser extent, depending on the hardness of the undercoat.



Quelle: Fa. Erichsen

Fine cracks in the coating are visible by staining the tested surface. The pressure is specified where first continuous circular damage occurs. Comparability of the results is only possible for tests on the same undercoat!

Slip resistance: BGR 181 (Flooring in workspaces and areas with danger of slipping)

German Trade Association Regulations for Health and Safety at Work (BGR Regeln) are compilations or ascertainment of contents from, for example

- state occupational safety regulations (laws, regulations) and / or
- trade association regulations (accident prevention regulations) and / or
- technical specifications and / or
- the experience of trade association prevention work.

The method for testing slip resistance is specified in DIN 51130 „Testing of floor coverings regulates; determining slip resistance; workspaces and work areas with increased risk of slipping; inspection methods; inclined planes. The surface to be tested is mounted on the test device and „contaminated“ with a certain amount of standard mineral oils.

Then the examiner walks over the surface wearing safety shoes with a standardized sole. During the inspection the tilt of surface is adjusted.

It is tilted so long as the examiner still has the feeling to be able to walk safely.



The angle of tilt is then read and results in the classification of the appropriate R group:
Overall average evaluation group

from 6° to 10°	R 9
greater than 10° to 19°	R 10
greater than 19° to 27°	R 11
greater than 27° to 35°	R 12
greater than 35°	R 13

Typical parquet tests:



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Testing agent and stress groups

High quality industrially produced parquet surfaces are tested, amongst others, according to EN 13442. The extreme demands required in this standard are only fulfilled by certain industrially produced UV-systems. Therefore, most of the coating materials used in the trade are tested according to the better known (in the furniture industry) DIN 68861. This DIN standard uses more test substances and focuses on practice oriented effective duration:

Test substance	1A		1B		1C	
	D	A	D	A	D	A
1 Acetic acid	16 hrs	5	1 hrs	5	–	–
2 Citric	16 hrs	5	1 hrs	5	–	–
3 Ammonium hydroxide	16 hrs	5	2 min	5	–	–
4 Ethanol	16 hrs	5	1 hrs	4	–	–
5 Red wine	16 hrs	5	6 hrs	5	10 min	5
6 Beer	16 hrs	5	6 hrs	5	10 min	5
7 Cola	16 hrs	5	16 hrs	5	10 min	5
8 Coffee	16 hrs	5	16 hrs	5	10 min	5
9 Black tea	16 hrs	5	16 hrs	5	10 min	5
10 Black currant juice	16 hrs	5	16 hrs	5	10 min	5
11 Condensed milk	16 hrs	5	16 hrs	5	10 min	5
12 Water	16 hrs	5	16 hrs	5	10 min	5
13 Petrol	16 hrs	5	2 min	5	–	–
14 Acetone	16 hrs	5	10 s	2	–	–
15 Ethyl-Butyl acetate	16 hrs	5	10 s	2	–	–
16 Butter	16 hrs	5	16 hrs	5	–	–
17 Olive oil	16 hrs	5	16 hrs	5	–	–
18 Mustard	16 hrs	5	6 hrs	5	–	–
19 Onions	16 hrs	5	6 hrs	5	–	–
20 Disinfectant	16 hrs	5	10 min	5	2 min	5
21 Black ball point pen ink	16 hrs	5	–	–	–	–
22 Stamping ink	16 hrs	5	–	–	–	–
23 Detergent	16 hrs	5	1 hrs	5	–	–
24 Cleaning solution	16 hrs	5	1 hrs	5	2 min	5

D: Effective duration







A: Requirement as classification code according to DIN EN 12720-2009-07

Source: Beuth-Verlag;
DIN 68861-1:2011-01

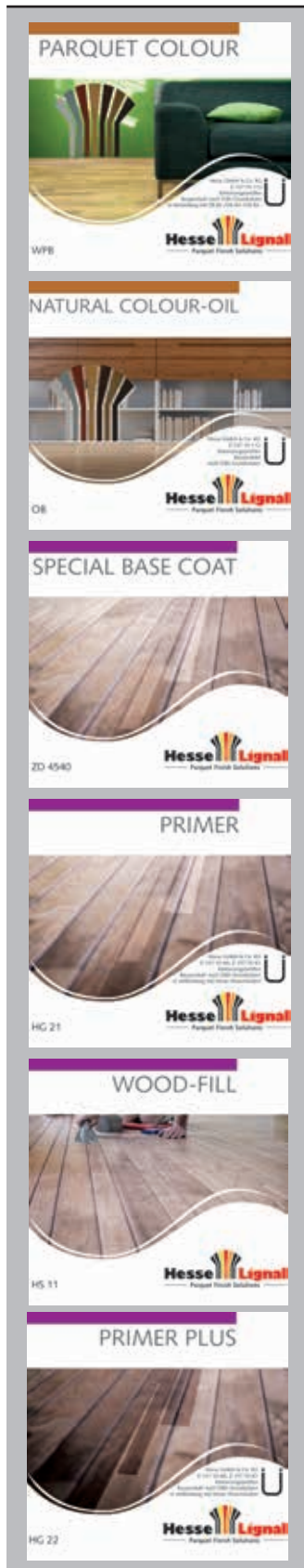
Evaluation Scheme:

- 5 no visible changes
- 4 even discernible changes in gloss or colour
- 3 slight change in gloss or colour; the structure of the test surface is unchanged
- 2 severe marking visible; the structure of the test surface is still generally unchanged.
- 1 severe marking visible; the structure of the test surface is changed
- 0 test surface severely changed or destroyed

The chemical resistance of oiled parquet surfaces is only partially comparable with sealed surfaces due to the significantly lower layer strengths. The stable properties are indeed mainly determined by the quality of the oil used, however, the working procedure, the type of wood used and the raw wood sanding also play a major roll in the suitability for daily use of an oiled surface.

	W1	Water dilutable surface treatment agent solvent free
	W2+	Water dilutable surface treatment agent, solvent content up to 5 %, N-methylpyrrolidone free
	W2	Water dilutable surface treatment agent, solvent content up to 5 %
	W3+	Water dilutable surface treatment agent, solvent content up to 15 %
	W3	Water dilutable surface treatment agent, solvent content up to 15 %
	W1/DD	solvent free, Water dilutable surface treatment agent with isocyanate hardener
	W2/DD+	water-based wood floor finish with isocyanate hardener, solvent content up to 5 %, N-methylpyrrolidone free
	W3/DD+	-based wood floor finish with isocyanate hardener, solvent content up to 15 %, N-methylpyrrolidone free
	W3/DD	Water dilutable surface treatment agent with isocyanate hardener solvent content up to 15 %
	G1	High solvent-borne base sealer wood putty, disaromatised and low ebullition free
	G2	high solvent borne base sealer and wood putty aromatic compounds and low ebullition
	KH1	high solvent-borne oil resin sealer ,disaromatised
	Ö10+	solvent free oil/wax, butanone oxime free
	Ö10	oils/waxes, solvent free
	Ö10/DD+	solvent free oils with isocyanate hardener, butanone oxime free
	Ö20+	solvent free oils/waxes, disaromatised, butanone oxime free
	Ö40+	solvent borne oils/waxes, disaromatised, butanone oxime free
	Ö40	oils/waxes, solvent borne, disaromatised
	Ö50	oils/waxes, solvent borne, aromatic
	Ö60	oils/waxes, high solvent borne, disaromatised
	PU50	PU-System, solvent borne harmful to health, sensitising
	GE10	emulsions/dispersions
	GE20	emulsions/dispersions, solvent borne (5-15 %)
		
		
		
		
		

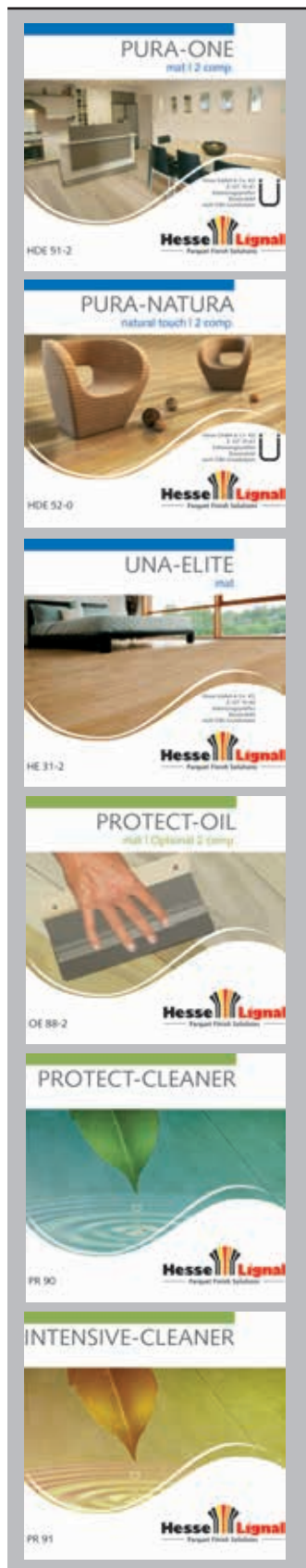
Guides for stained parquet and wooden flooring



The natural beauty of a wooden floor is enhanced by use of parquet stains developed by Hesse. When used in conjunction with Hesse Oil Sealer it is possible to produce individual, exclusive effects that can cope with the highest possible stress and strain. There are a number of features to note, not including the normal preparations and processing of the parquet stain, in order to permanently retain the value of the stained and subsequently oiled surfaces:

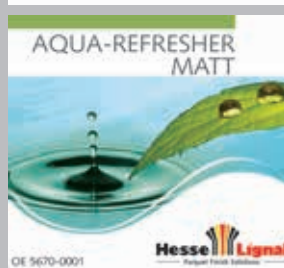
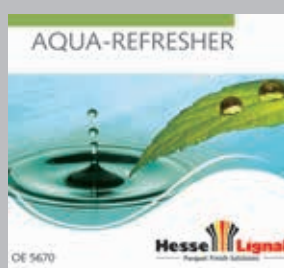
1. Parquet and stairs will inevitably show signs of use. When this appears will depend on the scope, magnitude, type and intensity of the stress placed on the surface.
2. Stained wooden flooring requires an oil layer of sufficient strength to ensure adequate protection. The more oil applied to the surface, the higher the resilience it will have. If insufficient oil sealer is applied the protective effect is accordingly low and the stain can rub off. For example, exposure to moisture (floor cleaning water etc) can, in extreme cases, cause the colour and stain appearance to change.
3. Proterra Oils are not suitable for use on parquet stains, since they do not provide the protection needed for this application!
4. In order to preserve the longevity of wood flooring it is essential to regularly clean and care for the surface. Timeframe is dependant on the level of wear, but it is advisable regardless of visible stress that you protect the floor, as it will only enhance its appearance and lengthen its life.
5. To ensure uniform colouring of the floor a reconditioning/repair process can be used to prevent damage to the coloured layer. Therefore, we recommend regular inspection by a registered body. Looming traces of wear and damaged can be detected and remedied before they worsen.
6. Please note the product-specific technical information and maintenance instructions in accordance with DIN 18356.

Guide for colouring old parquet and wood flooring with Hesse parquet stain.



1. Sand the parquet down to the raw wood (P120)
2. Measure the moisture of the timber (should not be under 8%). If necessary dampen the wood by with a flower spray, before allowing it to dry and repeating the sanding process.
3. Check the humidity (it should be no lower than 30%, but ideally 55 - 60%). If necessary use humidifier.
4. We recommend a pre-coating using the colourless parquet stain (CLEAR- WPB 1000) on fragile wood to prevent uneven or blotchy stain results. Apply WPB 1000 (roll/spray) and work it in to the surface until completely dry (single disc machine with a white pad)
5. Drying time: overnight with at least 16 hours 20 °C with sufficient air movement.
6. Colour scheme: stain (WPB1.colour tone) apply (roll / spray) with good, but not excessive, wetting and immediately work in to the surface using the aforementioned single-disc machine/white pad until completely absorbed into the wood. Rotation marks from the single disk machine indicate an excess of stain that must be levelled out. For large surfaces the pad must be changed when necessary. Slight damping of the pad with water eases the distribution of the stain. Finally remove any excess in the corner regions by hand. Work larger surfaces in pairs.
7. Drying time: overnight with at least 16 hours 20 °C with sufficient air movement.
8. Top coating: preferably water based for all Hesse parquet sealers. When sealing with oils please note the separate recommendation.

Tips and tricks on parquet surface design



Basics for parquet surface design:

Theoretically almost everything is possible with parquet surface design, but nowhere near everything is sensible or recommended without correct information (and practice!)

By using common sense and careful planning the floor of your nightmares can be avoided. Here is a list of the most important facts in advance:

Handling of the coating materials:

Storage:

All parquet coating materials should be stored in well sealed original containers at 20 °C. Since this is not always possible, storage must be maintained at least between 15 – 25 °C so that the materials are not exposed to a large variation in temperature. Rooms without direct sunlight are particularly suitable. Special hydro lacquer materials must be protected from frost!

Processing:

To a large degree the storage of the material has a direct influence on its use in production. The ambient temperatures during processing are therefore particularly important for subsequent coating processes. Care must be taken to ensure that there are no great variations in temperature and if possible that the temperature remains between 18 – 20 °C. Humidity must also be considered with hydro sealers! Too high delays drying - too low accelerates! Draught should also be avoided during the drying phase. In extreme cases this can lead to blotching and cracking of the sealant layers. Direct sunlight on the freshly treated surface should also be avoided!

If these parameters are not strictly adhered to, a professional should postpone the coating until the environmental in which they work cannot directly influence the result of their efforts (at very high temperatures it is best to do the sealing either early in the morning or late in the evening). The addition of RETARDERS can alleviate the influence of higher processing temperatures, but in some circumstances it can cause problems, so the use should be carefully considered!

- No coating should be carried out at room and object temperatures under 15 °C and over 25 °C!
- The site should be draught free, but well ventilated and with no direct sunlight!
- The freshly coated surfaces must be allowed to dry evenly and adequately!
- The parquet must be perfectly sanded and free of dirt, oil, wax and cleaning product residue.
- A test coating should be done when using unknown or exotic types of wood. A specially put aside test surface is ideal for this.
- Intermediate sanding should always be carried out with a sufficiently abrasive product (grid, disc, etc). If it is too fine or worn out it can lead to adhesion problems!
- If the drying period between the first and the second coats exceeds 24 - 48 hours (depending on material!) an intermediate sanding must be carried out to prevent adhesion problems.
- Please note the current safety Data Sheet as well as the technical information sheet before the use of each product.

Following the above advice is what distinguishes the professional user from the rest.

Simply put - **Attention to detail!**

Damage and prevention: of sealed parquet surfaces

<p>1. Imprints by furniture</p> <p>Cause: Lacquer has not sufficiently hardened.</p> <p>Pressure marks caused by moving in furniture too early. Sliding marks caused by chair slides; even caused by plasticizer migration from plastic slides or from anti-slip carpet under lays.</p> <p>Solution: Sufficient hardening of the parquet lacquer (see technical info) use felt pads for moveable furniture.</p> <p>Correction: Sand the lacquer surface completely until the imprints cannot be seen and re-lacquer!</p>	<p>2. Spotting / adhesion problems</p> <p>Cause: Undercoat / sealant has been too long in one spot before being applied. (e.g. pouring out of the container directly onto the wood).</p> <p>Or primer is incompatible with covering lacquer. During refurbishment: old coating not completely removed.</p> <p>Solution: Coat with primer straight from container. Sand old lacquer without trace. Use special primer. Only use tested material combinations.</p> <p>Correction: Sand down to the raw wood; Completely remove residue.</p>	<p>3. Dissolving of the lacquered surface</p> <p>Cause: Improper cleaning and / or maintenance product or the plasticizer (e.g. carpet backing, anti-slip under lays etc.) moves under the lacquer layer.</p> <p>Solution: Use cleaning agents from the manufacturer of the coating material. Switch to plasticizer free under lays; with carpets with PVC backing carry out 2C lacquering.</p> <p>Correction: sand and reseal the complete floor.</p>
<p>4. Mat spots</p> <p>Cause: The lacquer has been applied too thick in some areas. Afterwards raised spots seem duller after sanding. Possible draught during the drying period of the lacquer. Possibly sealant not sufficiently stirred or with 2C systems the hardener not evenly poured.</p> <p>Solution: Apply mat sealing evenly, not too thick and without much pressure when sanding.</p> <p>Correction: Sand whole floor until the mat spots have gone and apply new lacquer layer.</p>	<p>5. Disintegration of the joint's filler</p> <p>Cause: The ratio of joint putty with sanding powder does not match. Lack of bonding amongst itself and with the wood base with too much sanding powder. With fine sanding the joint putty will to a large extent be torn from the joints. Joints that are too large are under filled. The joint putty sags in deep joints and disintegrates.</p> <p>Solution: More joint putty and less sanding dust. Joint putty still absorbs sanding dust over the surface. If necessary putty a second time shifted 90°</p> <p>Correction: Sand whole floor down to wood. Re-putty the joints and reseal.</p>	<p>6. Blistering</p> <p>Cause: Draught at high temperatures (mostly in summer) Direct sunlight in front of large windows. Unsuitable sealer roller. With 2C products; hardener not sprinkled in but mixed at too high a speed in a mixer.</p> <p>Solution: Do not coat parquet at temperatures above 25°C (lacquer only early in the morning or evenings.) Avoid direct sunlight. Close blinds; turn off under floor heating in time. Delay lacquering slightly. Stir in hardener only by intensive shaking in container.</p> <p>Correction: Sand surface with 120 grain until the blisters have gone and reseal.</p>
<p>7. Discolouration</p> <p>Cause: Spotting due to alkalinity of the aqueous coating.</p> <p>Solution: Use special primer. Do not pour aqueous lacquer direct on to the wood. Apply with brush or roller out of the lacquer container. Avoid puddle formation.</p> <p>Correction: Sand whole floor down to the wood and reseal.</p>	<p>8. Orange skin (wrinkles)</p> <p>Cause: Previous lacquer layer detaches again and lifts upwards. Possibly application quantity too high of existing sealing layer resulting in insufficient drying. (Drying parameters not observed?) wrong material combination of primer and sealing.</p> <p>Solution: Adhere to drying times between lacquer layers! Calculate longer drying times in the case of low temperatures and / or high humidity. Use suitable material combinations.</p> <p>Correction: Sand the whole floor well and reseal</p>	<p>9. Streaks in the wood</p> <p>Cause: Sanding error in wood especially in the transition area between edges and surface can lead to discoloration. Switching between different sanding medium within the surface.</p> <p>Solution: Wood sanding must be carried out very carefully. Gradual sanding up to 120 grain with lacquer. Even out transition areas between surface and edge with a single disc sanding machine.</p> <p>Correction: Sand the whole floor down to the wood, fill joints and reseal.</p>

Damage and prevention: of sealed parquet surfaces



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<p>10. Drying/ Hardening</p> <p>Cause: Bad drying conditions. As well as temperatures from min. 15 – max. 25°C there must also be sufficient air exchange. Water vapour in saturated air must be regularly exchanged with „fresh air“ so that the given drying times can be achieved and the desired properties of the coating material can be formed. Also, with 2C lacquers the mixing ration not adhered to. Too low temperatures and / or too high humidity and / or too thick application of lacquer.</p> <p>Solution: Take care of mixing ratio with 2C lacquers. Room / material temperature not below 18°C (ideal+18-25°C). Humidity within 40-70% (ideal 55-65%). Wood moisture between 8-12%; Make sure there is enough air exchange (draught free!)</p> <p>Correction: Adjust room temperature and provide air exchange (no draught) In extreme cases complete sanding and re-construct.</p>	<p>11. Protrusions</p> <p>Cause: Wrong method due to uneven application. Wrong tools. Temperature too high (>+25°C).</p> <p>Solution: Apply evenly wet-on-wet. Careful application without too much / too little overlapping! Do not work into areas too dry! Use suitable roller or brush. Work with several people on large surfaces and coordinate the work directions beforehand! Avoid temperatures >+25°C (lacquer early mornings or evenings). Turn off under floor heating in time. Possible use of retarder.</p> <p>Correction: Sand and then reseal the layers where the protrusions are visible.</p>	<p>12. Fractured joints (Block fractures)</p> <p>Cause: Experience shows that fractured joints are always in direct connection to side-bonding. In turn this also depends on indoor climate, wood moisture, type of wood, adhesive, state of the base and the lacquer system.</p> <p>Solution: Ensure steady indoor climate (55-65% relative humidity). Wood moisture of the parquet should be 8-12%. Use special parquet primer to prevent block and side-bonding.</p> <p>Correction: Sand complete floor down to raw wood, as far as possible; check substructure and bonding; refill joints and reseal using suitable primer.</p>
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Damage and prevention: of oiled parquet surfaces:

<p>1. Glossy / sticky patches</p> <p>Cause: Oil worked in not without traces and the surface is dry</p> <p>Solution: Work in oil without trace in the given time and if need be, to be on the safe side wipe dry with a lint-free cloth.</p> <p>Correction: Sand whole floor and re-oil. In particularly „sticky“ surfaces, scrape first as far as possible, and then sand the rest.</p>	<p>2. Spotting</p> <p>Cause: Uneven sanding of the wood leads to uneven absorption of the oil and therefore to spotting. A large amount of oil is poured directly from the container on to the wood and then spread.</p> <p>Solution: Graduated smooth wood sanding without transitions is absolutely necessary with oil. Never omit a sanding process to save time. Only pour from an appropriate container as much oil on to the wood that can be spread evenly in one stroke.</p> <p>Correction: Sand whole floor down to raw wood, prepare gradually with 120 grain and re-oil.</p>	<p>3. Bad water or stain resistance</p> <p>Cause: insufficient oil application, inappropriate cleaning and maintenance. The number of layers of oil determine the resistance of the oiled surface. Resistance also depends on the actual type of wood and its pore marks!</p> <p>Solution: Wood floors must be oiled so long as the wood cannot absorb any more oil. Remove surplus oil with a lint-free cloth and then after drying maintain regularly with Protect-Cleaner. Depending on stress clean with intensive cleaner first. To avoid usage marks it is necessary to re-oil in time and regularly.</p> <p>Correction: Sand whole floor down to raw wood, prepare gradually with 120 grain and re-oil.</p>
<p>4. Colour changes in oiled surfaces</p> <p>Cause: Both real wood as well as natural oils change under influence of light and heat. (Too much light as well as light deprivation (dark yellowing) may lead to colour changes!) This distinguishes this group of „natural materials“. Normally this process is slow and even, so the changes are not at first noticed. On the contrary, in most cases these changes are wanted and happily accepted. But with some exotic woods or coloured oil applications this characteristic is, in some circumstances, relatively early and clearly noticeable. (e.g. through strong incidences of light by terrace doors, floor to ceiling windows, white oils etc.)</p> <p>Solution: Because this effect is a sign of naturalness, there is really no solution. Rejection of natural products might provide some help. However, this often means turning away from a good philosophy and should be well thought out! But also using materials with a much higher light-fastness can delay the process of colour change but not completely prevent it! In individual cases it is possible to fall back on an indigenous wood which is not so greatly influenced by light. It is subsequently and appropriately coated with a special parquet stain designed to be close to the colour tone of the „exotic wood“. But once again; the colour change can only be weakened and delayed! So the customer must be made aware of this special characteristic of the oiled parquet when commissioning so that there will be no nasty surprises!</p> <p>Correction: If necessary sand the whole floor to the raw wood and re-oil.</p> <p>Caution! Do not retreat white or light oil surfaces with colourless oils!</p>		

Parquet Colour



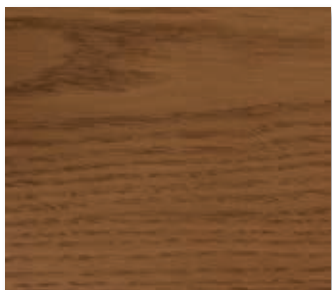
Cherry WPB 1001



Cottage Pine WPB 1002



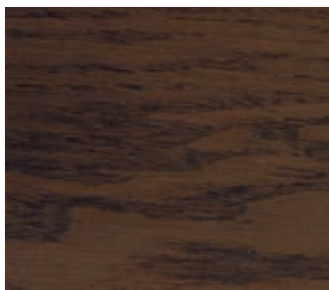
Mahogany WPB 1004



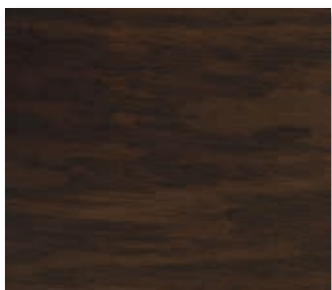
Cognac WPB 1005



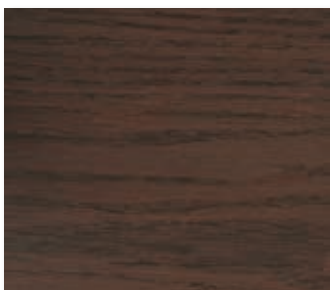
Teak WPB 1006



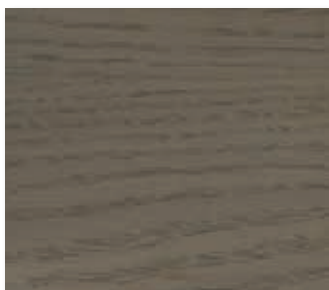
Smoked Oak WPB 1007



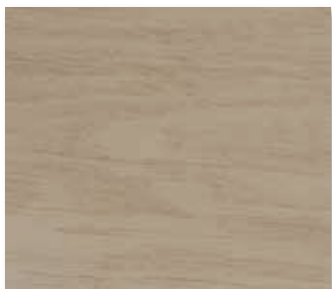
Walnut WPB 1008



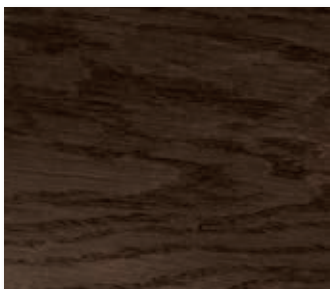
Chocolat Brown WPB 1106



Anthracite WPB 1034



Pebble Grey WPB 1036



Sugar Brown WPB 1105



Beige WPB 1037



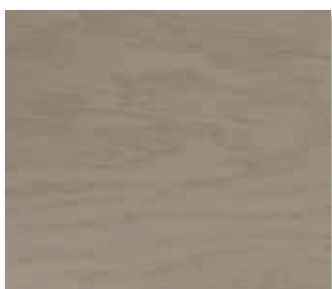
Vintage Oak WPB 1160



Smart Grey WPB 1144



Castle Brown WPB 1149



Olive Grey WPB 1154

Natural-Colour-Oil



Teak OB 83-133



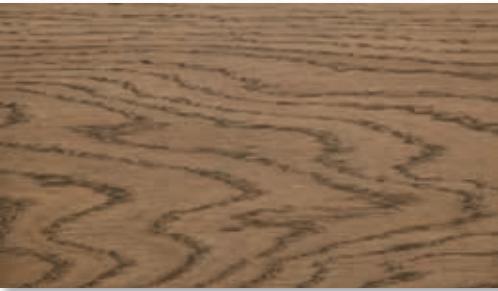
Dark Walnut OB 83-804



White OB 83-700



Black OB 83-900



Castle Brown OB 83-702



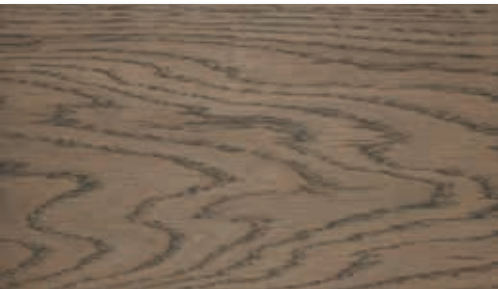
Ebony OB 83-901



Grey OB 83-703



Primer White Oil OB 84-77



Olive Grey OB 83-740



Primer White Oil OB 84-77 + WPB 1037



Light Walnut OB 83-803

Editor
Hesse GmbH & Co. KG

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For print-technical reasons, the shown samples and photos may differ from the original colour tone.

Our products are manufactured according to the latest findings in research and practice; new findings will lead to technical changes, which may differ from this presentation.

The technical information shown in this parquet catalogue is the current information at the time of print. Any corrections and therefore, the latest edition can be found in internet under www.hesse-lignal.com

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Step into our World



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