

>Product description

Our colourless HYDRO-PU multicoat lacquer creates an attractive, dull matt, natural wood effect combined with good scratch resistance and surface durability. Using this light fast 2C natural wood effect lacquer results in the special natural wood effect being retained for a very long time. This product is suitable for priming and top coating open pored surfaces.

>Areas of application

For all interior fittings in living areas, with a natural wood effect; predominantly on light woods. Also for stairs and handrails. Can also be used on bleached surfaces (that are adequately dry).

>Surface Preparation

Surface preparation	Clean, dry wood, free of oil, grease, wax and silicones. Sanded as prescribed and free from sanding dust.
Substrate sanding grits from-to	120 - 220
Lacquer sanding (grit) from - to	280 - 320
Comments on sanding	The quality and uniformity of the wood / substrate and of the lacquer sanding are crucial to the final surface finish. After sanding, remove dust as prescribed.

>Finishing

Finishing	After suitable drying can be recoated with the same product.
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>Times

Usage time	2 h / 20 °C
Working Temperature Range	18 - 22 °C
conditions of transport	10 - 30 °C
Pot life	2 h / 20 °C
Drying	3 h / 20 °C
Stackable after	> 16 h / 20 °C
Complete drying	7 d / 20 °C

>Application

Application	Nozzle size in mm	Spray pressure in bar	Atomising pressure in bar
Spraying			
Airless	0,23 - 0,38	100 - 120	
Air mix	0,23 - 0,38	60 - 100	1,5 - 2,5
Compressed air spraying	1,5 - 2,0	2,5 - 4	

>Processing instructions

Add hardener slowly whilst stirring. Adjust the spray viscosity with water if required. Maximum additive volume 5 %. The hardener must always be added before thinning! Never store product mixed with hardener in closed containers. Over-paintability: possible with another coat of the same product or with suitable colourless materials. Clean tools with water. For removal of dried lacquer residues use Hesse HYDRO Cleaning agent HV 6917. In case of combined coatings (HYDRO- and solvent based lacquers) rinse application tools with Hesse HYDRO Reversing agent HV 6904.

Technical information

Hesse HYDRO-PU Natural Wood effect HDE 54500-0001

Mixing ratio (by volume): 10 : 1 HYDRO Hardener HDR 5081

>Technical data

Flow time (+/- 15 %)	60 s / DIN 53211 - 4 mm
Appearance	colourless
Decopaint basis	WB
Decopaint category	J
Density series kg/l	1.023
Yield per coat	10 - 13 m ² /l The spreading rate is heavily dependent on the type of application. The specifications relate to a liter of ready-for-use product, if necessary including hardener and thinner.
Form of delivery	fluid
Non-volatile content series %	22
VOC EU %	6 %
VOC FR	A+
Working Temperature Range	18 - 22 °C
Storage temperature	10 - 30 °C
Shelf life in weeks	26
conditions of transport	10 - 30 °C
Working temperature	20 °C
Number of coats (max)	2
Amount per layer (minimum)	80 g/m ²
Amount per layer (max)	100 g/m ²
Total application volume	200 g/m ²
Mixing ratio (by volume)	10 : 1 HYDRO Hardener HDR 5081
Mixing ratio (gravimetric)	100 : 10 HYDRO Hardener HDR 5081

>Ordering information

Order number	Gloss level 60° (Gloss)	Gloss level	Container Size
HDE 54500-0001	0 - 3	dull matt	5 l, 15 l, 25 l

>Hardeners

Order number	Product description	Container Size
HDR 5081	HYDRO Hardener	0.5 l, 1 l, 2.5 l, 15 l

>Equipment cleaner

Order number	Product description	Container Size
HV 6904	HYDRO Reversing agent	0.25 l, 1 l, 5 l, 25 l
HV 6917	HYDRO Cleaning agent	1 l, 5 l, 25 l

>Cleaning agent and care product

Order number	Product description	Container Size
GR 1900	Cleaning agent	1 l, 2.5 l, 3 l, 25 l

>Particular instructions

The product can be used on surfaces that have been bleached with hydrogen peroxide and thoroughly dried. Pre-priming on tanning-rich woods such as oak with HDG 5410. Beware! Do not sand through the basecoat as there is a risk of staining.





>Sample process

Commercial furnishings, natural oak-wood effect Wood-sanding grit 120 - 150 with subsequent dust removal. Basecoat: 1 - 2 x 80 - 120 g/m² Hesse HYDRO-PU natural wood primer HDG 5410, mixing ratio (by volume) 10 : 1 with Hardener HDR 5081. Intermediate drying: at least 2 h / 20 °C room temperature with sufficient air circulation. Smoothing: grit 400 with subsequent dust removal. Top coating: 1 x 100 - 120 g/m² Hesse HYDRO-PU Natural Wood-Effect HDE 54500-0001, mixing ratio (by volume) 10 : 1 with Hardener HDR 5081. Packable: after drying for at least 16 h / 20 °C room temperature and sufficient air circulation.

>General information

When working with HYDRO materials, parts that come into contact with the material must be made from stainless steel. The moisture content should be between 8 - 12 %. Do not apply or dry HYDRO lacquers at material or room temperatures below 18 °C. The ideal humidity for application lies between 55 and 65 %. During the lacquering process, a humidity level that is too low leads to surface defects (such as shrink cracks, etc.). Excessive humidity during the drying phase may drastically lengthen the drying time! In order to avoid adhesion problems, please sand the lacquered surfaces freshly before coating and apply lacquer to the sanded surfaces as soon as possible. When applied to foils, etc., please use a sample coating on the respective substrate to check the adhesion! The ideal complete hardening of lacquered surfaces that have been flashed off is reached at temperatures over 20 °C up to no more than 40 °C. Adequate, draft-free air exchange must be assured. The complete hardening of the lacquer will be reached after one week of proper storage (at least 20 °C room temperature). Woods containing large amounts of natural oils, such as teak, can negatively influence adhesion under certain circumstances. Water-soluble wood ingredients such those in ash and tannins in woods such as oak may cause colour changes and discolourations in the coating. We recommend that you always conduct a sample lacquering to evaluate the colour effect, adhesion and drying process under real conditions!

>Particular properties and/or testing standards

Test standard / basis	Testing laboratory	Mark	Report	No.
Product meets the requirements of solvent based paints and coatings regulation - ChemVOCFarbV (German ordinance on solvent-based paints and varnishes) - according to the national implementation of 2004/42/EG ("Decopaint Directive").	HESSE			
PVC-resistant	HESSE			
Saliva and sweat resistance according to DIN 53160 Parts 1 and 2: no discolouration (Level 5)	HESSE			
Toy safety DIN EN 71-3 (2014-12)	HESSE			

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