Technical information

Hesse COOLPRO-COLOR pearl structure velvety fine HDB 54782-(color tone)

Mixing ratio (by volume): 20 : 1 HYDRO Hardener HDR 5091

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Product description

COOLPRO-COLOR Pearl structure velvety fine is a top-quality, water-based, two-component colour lacquer with an extremely fine pearl texture. This light-resistant lacquer material is characterised by its high mechanical resistance and minimal gloss formation given heavy demands. The use of high-quality, very fine structure agents gives the product a particularly pleasant feel.

Areas of application

COOLPRO-COLOR Pearl structure velvety fine is versatile to use in the complete field of interior fittings, including those in high-demand areas like kitchens and bathrooms. A high-quality surface is achieved on filled surfaces (such as COOL-FILL HP 6645-9343 or PERFECT-FILL HDP 5650-9343). Thanks to its convincing opacity and strong adhesion, COOLPRO-COLOR Pearl structure velvety fine enables direct coating onto many priming foils.

Area of application

- Internal fit-out
- Kitchen and bathroom
- Furniture

Substrate material

- MDF
- suitably pre-primed
- Priming foil
- Melamine foil
- Paper foil

Surface Preparation

Surface preparation		Clean, dry wood, clean suitable foil substrate or matching pigment filler. Free from oil, grease, wax and silicones. Correctly sanded and free from sanding dust.
Substrate sanding grits		120 - 400
Lacquer sanding grit		280 - 600
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.

Application

Application		Spray nozzle size	Spray pressure	Atomizing pressure
2C line				
Airmix		0.23 - 0.38 mm		1.5 - 2.5 bar
Compressed air spraying		1.5 - 2 mm	2.5 - 4 bar	

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Times

Pot life	2 h / 20 °C
Usage time	2 h / 20 °C
Drying	6 h / 20 °C
Stackable after	16 h / 20 °C
Complete drying	7 d / 20 °C

Finishing

Finishing	After gentle sanding, can be recoated with itself or with PERFECT-TOP HDE 5400x(gloss level).

Processing instructions

The maximum processing time for COOLPRO-COLOR Pearl structure velvety fine is 2 h / 20 °C. Exceeding this time limit can result in damage to the material supply lines and the spray gun.

Add the hardener in a fine stream while stirring. Then adjust the spray viscosity by adding water or HYDRO Optimizer HZ 70. Maximum added quantity 5 %. The hardener must always be added before dilution! Never store any material mixed with hardener in closed packaging. Use water to clean work tools. Use Hesse HYDRO Cleaning agent HV 6917 to remove any dried lacquer residues. Use Hesse HYDRO Reversing agent HV 6904 to rinse out combined application devices (those used for both HYDRO and solvent-based lacquers).

Particular instructions

Pre-priming is possible depending on the substrate and desired surface, for instance using COOL-FILL HP 6645-9343 / HP 6645-9005, PERFECT-FILL HDP 5650-9343 / HDP 5650-9005

COOL-COLOR Pearl structure velvety fine can also as necessary be coated directly onto well finished and sanded MDF edges (280 – 320 grit). The lacquer processor should follow the manufacturer information on EU Standard EN 622-5 Point 4 Test Method EN 317 (Requirements for thickness swelling) when selecting a suitable MDF quality for the field of application.

It is advisable to use HYPERION TD 130 to prevent yellowing when using light colour tones of COOLPRO-COLOR Pearl structure velvety fine on content-rich woods like oak. Exotic woods or extremely resinous knotty pine should be primed in advance using transparent PU Isolating primer DG 4720-0001. A trial coating may be required. Hevea brasiliensis should be isolated in advance using COOL-PROTECT HI 6600-9343. More detailed information is respectively available via HYPERION TD 130, PU Isolating primer DG 4720-0001 and COOL-PROTECT HI 6600-9343.

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Technical data

Flow time (+/- 15%)	33 s / DIN6
Proportion of renewable raw materi-	0.34 %
NfA	46.4 - 46.7 %
VOC EU	0.68 %
VOC FR	A+
conditions of transport	10 - 30 °C
Shelf life in weeks	26
Storage temperature	10 - 30 °C
Working Temperature Range	18 - 22 °C
Number of coats (max)	2
Amount per layer (minimum)	100 g/m²
Amount per layer (max)	150 g/m²
Total application volume	300 g/m²
Mixing ratio (by volume)	20 : 1 HYDRO Hardener HDR 5091
Mixing information (gravimetric)	100 : 5 HYDRO Hardener HDR 5091

Particular properties / testing standards

Sign	Product standard / basis
	DIN 68861-Part 1C (Furniture surfaces; Behaviour under chemical demands)
	DIN 68861-Part 7C (Behaviour with regard to dry heat) and DIN 68861-Part 8B (Behaviour with re-gard to damp heat)
	Saliva and sweat resistance according to DIN 53160 Parts 1 and 2: no discolouration (Level 5)

Sign	Product standard / basis
	Product meets the requirements of solvent based paints and coatings regulation - ChemVOCFarbV (German ordinance on solvent-based paints and
	PVC-resistant

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Sample process

Colour lacquer coatings on foil-coated MDF

Substrate sanding: e.g. 280 grit with subsequent dedusting.
Basecoat: 1 x 200 - 250 g/m² COOL-FILL HP 6645-9343.
Drying: at least 5 h / 20 °C; better 16 h / 20 °C room temperature with adequate air circulation.
Intermediate sanding: 320 - 400 grit with subsequent dedusting.
Top coat: 1 x 100 - 130 g/m² COOLPRO-COLOR Pearl structure velvety fine HDB 54782-(colour tone)
Drying: at least 16 h / 20 °C room temperature and with adequate air circulation.
Complete drying: > 7 d drying and/or storage / 20 °C

Ordering information

Order number	Colour tone	Gloss level
HDB 54782-9010		matt

Accessories

	Order number	Product description
hardeners	HDR 5091	HYDRO Hardener
Retarder	HZ 5-56	HYDRO Retarder
Equipment cleaner	HV 6904	HYDRO Reversing agent
	HV 6917	HYDRO Cleaning agent

General instructions on workmanship

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!

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. Material safety data sheet is provided in accordance with EC regulation no. 1907/2006.

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