

>Product description

DG 4720-0001 is a transparent basecoat that is formulated for low viscosity and **fast-drying**. This coating material features a good **isolation effect** for use on **resinous woods** that are **rich in active substances** and is best suited for basecoats on very dark stained woods. DG 4720-001 is also suitable **for stabilising softwood** (improving scratch resistance). Moreover, sinkage is further reduced with DG 4720-0001 as an isolation sealer within a complete coating using high-solid, transparent basecoats and high gloss lacquers.

>Areas of application

DG 4720-0001 can also be used for shopfitting and all interior fixtures and fittings, including in kitchens and bathrooms as well as the fitting out of ship interiors.

>Surface Preparation

Surface preparation	Clean, dry wood, dependent upon wood type and method of application.
Substrate sanding grits from-to	150 - 180
Lacquer sanding (grit) from - to	320 - 400

>Finishing

Finishing	After sufficient drying and intermediate sanding with almost all Hesse PU lacquers.
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>Times

Usage time	30 - 60 min / 20 °C
Pot life	1 h / 20 °C
Drying	2 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			
2C line			
Airless	0,23 - 0,28	100 -150	
Airless low pressure			
Air mix	0,23 - 0,28	60 - 100	2,0 - 2,5
Compressed air spraying	1,8 - 2,0	1,8 - 2,0	
High-performance automatic spraying unit			
Automatic spray gun			
Spraying robot			

>Processing instructions

The process sequence and the number of coats required for insulation should be determined by applying a test coat to the original wood. Washing the wood beforehand with Hesse Wood soap BZ 850 or Hesse Thinner DV 4900 can reduce the amount of work involved. Please note that there may be changes to the colour and expressiveness of the wood as a result. A drying time of 16 h / 20 °C must be adhered to when working with content rich wood species! DG 4720-0001 can additionally be used on content rich, resinous woods or even on exotic wood species as an isolation sealer for transparent and coloured HYDRO lacquers. It should be noted that DG 4720-0001 must not be sanded back to the bare wood after drying and the required lacquer sanding. Please also observe the technical information for the respective HYDRO product. Conduct a trial coating on the original wood as necessary.

Technical information

Hesse PU isolating primer DG 4720-0001

Mixing ratio (by volume): 2 : 1 PUR Hardener DR 4040

>Technical data

Flow time (+/- 15 %)	28 s / DIN EN ISO 2431 - 3 mm
Appearance	colourless
Density series kg/l	0.894
Yield per coat	6 - 11 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 %	12 - 13
VOC EU %	88 %
VOC FR	A+
Storage temperature	16 - 25 °C
Shelf life in weeks	52
Working temperature	20 °C
Number of coats (max)	3
Amount per layer (minimum)	80 g/m ²
Amount per layer (max)	150 g/m ²
Total application volume	400 g/m ²
Mixing ratio (by volume)	2 : 1 PUR Hardener DR 4040
Mixing ratio (gravimetric)	100 : 58 PUR Hardener DR 4040

>Ordering information

Order number	Gloss level 60° (Gloss)	Container Size
DG 4720-0001	-	5 l, 25 l

>Hardeners

Order number	Product description	Container Size
DR 4040	PUR Hardener	2.5 l, 12.5 l

>Thinners

Order number	Product description	Container Size
DV 4994	PU Thinner	1 l, 5 l, 15 l, 25 l
DV 4981	PU Thinner	1 l, 5 l, 25 l

>Retarder

Order number	Product description	Container Size
DV 4909	PU Retarder	1 l, 5 l, 25 l

>Equipment cleaner

Order number	Product description	Container Size
RV 1	Cleaning thinner	5 l, 15 l, 25 l

>Particular instructions

This product is not suitable for application on bleached surfaces and for coating wengé wood. For use as MDF edge insulation under coloured lacquer systems, prepare the lacquer/hardener mixture with 20 - 30 % DV 494 or DV 4994 thinner. Always apply another coat on the same day, after prior sanding with grit 320 - 400 grit. When used as a flame retardant coating material for seagoing vessels according to SOLAS 74/88 Regulations II-2/3, II-2/5 and II-2/6, in the latest version, IMO Resolution MSC.36(63)-(1994 HSC-Code) 7 and IMO Resolution MSC.97(73)-(2000 HSC-Code) 7, this product may only be combined with other approved and technically suitable products. When used as a flame retardant coating material for seagoing vessels, the maximum total application amount in wet film is **200 g/m²**.

"A risk assessment was undertaken according to Directive 2014/90/EU, Annex II, Section 3. This coating does not pose a physical risk to health nor a risk to the environment when cured and dried."

>Sample process

Ship interior in stained mahogany, high-gloss

Wood sanding: 150 - 180 grit (dust removal)

Wiping stain: BE 15-20400

Drying: 2 - 3 h / 20 °C

Basecoat: 2 x 100 -120 g/m² Hesse PU Isolating primer DG 4720-0001 (intermediate drying in each case 20 - 30 min / 20 °C), mixing ratio (by volume) 2 : 1 with PU Hardener DR 4040 and the addition of 5 - 10 % Thinner DV 4994

Drying: at least 2 h / 20 °C

Lacquer sanding: 320 - 400 grit (dust removal)

Basecoat: 1 x 140 - 200 g/m² Hesse PU OPTI-BASE DG 4763, mixing ratio (by volume) 1 : 10 with PU Hardener DR 4037 and the addition of Thinner DV 4935 as required

Drying: 16 h / 20 °C

Lacquer sanding: 320 - 400 grit (dust removal)

Basecoat: 2 x 140 g/m² Hesse PU OPTI-BASE DG 4763 (intermediate drying in each case 45 - 60 min / 20 °C), mixing ratio (by volume) 1 : 10 with PU Hardener DR 4037 and the addition of Thinner DV 4935 as required

Drying: at least 16 h / 20 °C

The more porous the wood, the more basecoats to be applied. The final basecoat should appear completely smooth even before the last sanding operation! Allow the final basecoat to dry for at least 24 h / 20 °C

Lacquer sanding, progressively finer: 400 - 600 grit (dust removal)

Top coat: 2 x 100 - 120 g/m² Hesse PU Brilliant lacquer DU 45229 (intermediate drying in each case 20 - 30 min / 20 °C), mixing ratio (by volume) 2 : 1 with PU Hardener DR 4005 and the addition of 10 - 20 % Thinner DV 4935

High gloss polishing is possible after drying for at least 24 h / 20 °C

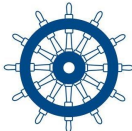
Packable: after 3 d / 20 °C

>General information

PU lacquers should not be applied and dried at material and room-temperatures below 18 °C and 40 % RH. Ideal values are: 20 - 25 °C, 50 - 65 % RH. Deviations will result in drying or hardening errors. In order to avoid adhesion problems, please sand the PU lacquered surfaces before applying fresh lacquer and apply lacquer to the sanded surfaces as soon as possible. Old lacquer and hardener mixtures affect the surface quality (adhesion/resistance). Freshly bleached substrates must undergo intermediate drying for at least 48 h at 20 °C before coating with suitable PU lacquers. If stored correctly (at least 20 °C room temperature), the final hardness of the coating is achieved after a week.

Please apply a test coat under real conditions!

>Particular properties and/or testing standards


Test standard / basis	Testing laboratory	Mark	Report	No.
EC type examination certificate (module B); coating agent for seagoing vessels according to IMO Resolution MSC.307(88)-(FTP-Code 2010).	Trade association transport and traffic; Ship Safety Division, Hamburg		Approval No. U.S. Coast Guard Approval No.	116264-03 164.112/ EC0736/116264-03

Technical information

Hesse PU isolating primer DG 4720-0001

Mixing ratio (by volume): 2 : 1 PUR Hardener DR 4040

>Particular properties and/or testing standards

Test standard / basis	Testing laboratory	Mark	Report	No.
Formulation is free of: wood preservatives, toxic heavy metals, phthalate plasticizers, formaldehyde, CMR substances in Categories 1A + 1B and volatile aromatic and halogenated organic compounds.	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.