

>Product description

DB 4524x(gloss level)-(colour tone) is an acrylate-based PU colour lacquer with **extremely good levelling**. Its **excellent adhesion properties** on almost all substrates, its **uncomplicated application** and a **pot life of 3 days** make this colour lacquer ideal for **universal use**. DB 4524(gloss level)-(colour tone) can also be coated over with all customary light fast finishing lacquers for optimal metal marking resistance.

>Areas of application

DB 4524x(gloss level)-(colour tone) can be used for shopfitting and all interior fixtures and fittings, including in kitchens and bathrooms as well as the fitting out of ship interiors. Aside from that, the product can be used with different types of hardeners and mixing ratios

>Surface Preparation

Surface preparation	Perform cleaning by sanding on foil or melamine before coating.
Substrate sanding grits from-to	150 - 320
Lacquer sanding (grit) from - to	320 - 400
Comments on sanding	In case of direct coating on cleaned and sanded foils, please make a test coating to check the adhesion! For a final coating of DB 4524x-(colour tone) with high-gloss, intermediate sanding of the lacquer is recommended with grit 600 - 800.

>Finishing

Finishing	Good metal marking resistance is achieved with the DB 4524x(gloss level)-(colour tone) colour lacquer range. We recommend top coating with the likes of Hesse PU Multicoat lacquer DE 4503x(gloss level) or DE 4259x(gloss level) if absolute metal marking resistance, colour abrasion resistance or a different gloss level is desired.
-----------	---

>Times

Usage time	8 h / 20 °C
Pot life	3 d / 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
Curtain coating			
Gap coating			
Poured rolling			
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			

Technical information

Hesse UNA-COLOR DB 4524x(gloss level)-(colour tone)

Mixing ratio (by volume): 10 : 1 PU Hardener DR 4070

>Processing instructions

The maximum total application amount in wet film when used as a flame-retardant coating for ocean-going vessels is 130 g/m². With direct coating on cleaned or sanded laminates, please conduct a trial coating to check bonding! Harden at 5 : 1 with DR 4070 for particularly demanding surface conditions and on critical substrates. Hardening at 10 : 1 with DR 4071 is required for direct coating on MDF. Hardening at 10 : 1 with DR 4085 can accelerate thorough drying. (Be aware of the shorter shelf life). Hardening at 5 : 1 with DR 4076-0001 after previously mixing in 5 % Glass lacquer additive EL 460-0025 to the lacquer composition also enables direct lacquer application on glass following proper cleaning.

>Technical data

Flow time (+/- 15 %)	45 s / DIN 53211 - 4 mm
Appearance	opaque
Form of delivery	fluid
VOC EU %	62 %
VOC FR	A+
Storage temperature	16 - 40 °C
Shelf life in weeks	52
Working temperature	20 °C
Number of coats (max)	2
Amount per layer (minimum)	80 g/m ²
Amount per layer (max)	150 g/m ²
Total application volume	300 g/m ²
Mixing ratio (by volume)	10 : 1 PU Hardener DR 4070
Mixing ratio (gravimetric)	100 : 8 PU Hardener DR 4070

>Ordering information

Order number	Colour tone	Gloss level 60° (Gloss)	Gloss level	Container Size
DB 45245-9001	9001	24 - 29	silk matt	1 l, 5 l, 25 l
DB 45245-9003	9003	24 - 29	silk matt	1 l, 5 l, 25 l
DB 45245-9005	9005	24 - 29	silk matt	1 l, 3 l, 5 l, 25 l
DB 45245-9010	9010	24 - 29	silk matt	1 l, 5 l, 15 l, 25 l
DB 45245-9016	9016	24 - 29	silk matt	1 l, 5 l, 25 l
DB 45245-9343	WEISS-9343	24 - 29	silk matt	1 l, 3 l, 5 l, 15 l, 25 l

>Hardeners

Order number	Product description	Container Size
DR 4070	PU Hardener	0.1 l, 0.5 l, 1 l, 2.5 l, 5 l, 15 l

>Thinners

Order number	Product description	Container Size
DV 4900	PU Thinner	1 l, 5 l, 15 l, 25 l
DV 4994	PU Thinner	1 l, 5 l, 15 l, 25 l

>Retarder

Order number	Product description	Container Size
DV 4909	PU Retarder	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

Technical information

Hesse UNA-COLOR DB 4524x(gloss level)-(colour tone)

Mixing ratio (by volume): 10 : 1 PU Hardener DR 4070

>Supplementary products

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

>Particular instructions

This product may only be combined with other approved and technically suitable products when it is used as a low-flammable coating for seagoing vessels according to the latest version of SOLAS 74/88 Regulations II-2/3, II-2/5 and II-2/6, IMO Resolution MSC.36(63)-(1994 HSC-Code) 7 and IMO Resolution MSC.97(73)-(2000 HSC-Code) 7. The specified certificates and resistance relate solely to DB 45245-(colour tone). Pre-priming is possible depending on the desired finish and substrate, for example using DP 4791-9343. Please use thinned MEGA-PUR DE 4503x(gloss level) or DE 4259x(gloss level) for the top coat if absolute ring and abrasion resistance or a different gloss level are required. **"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

Doctor's practice, open-pored ash with wetted pores, semi matt finish.

Wood sanding: 150 grit / dust removal)

Basecoat: 1 x Hesse UNA-COLOR DB 45245-9010 with so full a coating that the pores appear closed when wet (200 - 300 g/m²), mixing ratio (by volume) 10 : 1 with PU Hardener DR 4070 and the addition of 30 - 40 % Thinner DV 4900.

Drying: at least 16 h / 20 °C

Lacquer sanding: 320 grit / dust removal

Coating: 1 x 100 - 150 g/m² Hesse UNA-COLOR DB 45245-9010, mixing ratio (by volume) 10 : 1 with PU Hardener DR 4070 and the addition of 20 - 30 % Thinner DV 4900. Allow 1 - 2 h / 20 °C and, without lacquer sanding, apply a top coat of 80 - 100 g/m² Hesse MEGA-PUR DE 45034, mixing ratio (by volume) 10 : 1 with PU Hardener DR 4070 and the addition of 10 % Thinner DV 4900.



Complete drying: at least 16 h / 20 °C

>General information

PU lacquers should not be applied or dried at material and room temperatures below 18 °C and 40 % RH, ideal values: 20 - 25 °C and 50 - 65 % RH. Deviations lead to problems with drying and/or curing. To avoid adhesion problems, please gently sand back the PU lacquered surfaces before applying fresh lacquer and apply lacquer to the sanded surfaces as soon as possible. Mixed residues from the previous day must only be used as a 10 - 20 % aggregate in a fresh lacquer/hardener mixture. Old lacquer/hardener mixtures impair the surface quality (adhesion/stability). Freshly bleached wood must be allowed at least 48 h intermediate drying / 20 °C before recoating with PU lacquers. The final hardness of the coating is achieved after one week in correct storage conditions (at least 20 °C room temperature).

Please conduct a sample coating under real conditions!

>Particular properties and/or testing standards

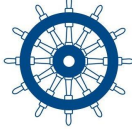



Test standard / basis	Testing laboratory	Mark	Report	No.
DIN 68861-Part 1B (Furniture surfaces; Behaviour under chemical demands)	HESSE		Test report no.	
Flame retardant to B1 according to DIN 4102; on suitable substrates.	MPA-Stuttgart		Test certificate no. certificate of compliance	P-BWU03-1-16.5.261230009422/2

Technical information

Hesse UNA-COLOR DB 4524x(gloss level)-(colour tone)

Mixing ratio (by volume): 10 : 1 PU Hardener DR 4070

>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 Ap- proval No.	116227-05 164.112/ EC0736/ 116227-05
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			
Flame retardant to B1 according to DIN 4102; on suitable substrates.	MPA-Stuttgart		Test certifi- cate no. certificate of compliance	P-MPA- E-15-526 230010256
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.