Technical information

Hesse PU Cellulose lacquer DE 4500x(gloss level)-0016 Mixing ratio (by volume): 10:1 PU DECORATIVE METAL Hardener DR 4008



>Product description

Two-component PU acrylic resin lacquer, clear and light-fast. A high-quality protective indoor lacquer for metal. The lacquer material is free from phthalate softeners and is therefore also suitable for coating children's toys.

>Areas of application

For all interior fixtures and fittings and top-coating degreased metal or metallic surfaces such as PU **DECORATIVE-METAL.**

>Surface Preparation

Surface preparation	The preparation of the substrate is critical for adhesion of the coating to metal. In individual cases, appropriate cleaning agents should be identified in experiments. In practice, the Hesse cleaning agent ZD 101 has proved good.
Substrate sanding grits from-to	150-180
Lacquer sanding (grit) from - to	280 - 320

>Finishing

Finishing	After drying and lacquer sanding with lacquer material from the same
	series of Hesse PU Cellulose lacquer DE 4500x(gloss level)-0016.

>Times

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Usage time	8 h / 20 °C	
Pot life	8 h / 20 °C	
Drying	6 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			
Electrostatic			

>Processing instructions

Single-coat application at $60 - 80 \text{ g/m}^2$ on properly prepared substrates. The addition of 20 - 30 % Thinner DV 490 or DV 4900 is recommended when spraying Hesse PU Cellulose lacquer DE 4500x(gloss level)-0016.

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>Technical data

Flow time (+/- 15 %)	60 s / DIN EN ISO 2431 - 4 mm
Appearance	colourless
Density series kg/l	0.894 - 0.919
Yield per coat	6 - 9 m²/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 %	17 - 21
VOC EU %	80 %
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)	100 g/m²
Amount per layer (max)	150 g/m²
Total application volume	450 g/m²
Mixing ratio (by volume)	10 : 1 PU DECORATIVE METAL Hardener DR 4008
Mixing ratio (gravimetric)	100 : 11 PU DECORATIVE METAL Hardener DR 4008

>Ordering information

Order number	Gloss level 60° (Gloss)	Gloss level	Container Size
DE 45000-0016	0 - 3	dull matt	5 l, 25 l
DE 45002-0016	8 - 12	matt	5 l, 25 l
DE 45004-0016	18 - 23	silk matt	5 l, 25 l
DE 45007-0016	40 - 59	satin gloss	5 l, 25 l
DE 45009-0016	≥ 90	high gloss	5 l, 25 l

>Hardeners

Order number	Product description	Container Size
DR 4008	PU DECORATIVE METAL Hardener	0.2 l, 0.5 kg, 1 l, 2.5 l, 5 kg

>Thinners

Order number	Product description	Container Size
DV 490	PU Thinner	1 l, 5 l, 15 l, 25 l
DV 4900	PU Thinner	1 l, 5 l, 15 l, 25 l
DV 494	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 499	Universal retarder	1 l, 5 l, 10 l, 15 l, 25 l
DV 4909	PU Retarder	1 l, 5 l, 10 l, 15 l, 25 l

>Equipment cleaner

Order number	Product description	Container Size
NV 395	Cleaning thinner	5 l, 15 l, 25 l

>Cleaning agent and care product

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

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>Particular instructions

>Sample process

The coating process and the precise treatment parameters are adapted in each case to the respective application and drying conditions and can be found in the customer-specific process descriptions (surface techniques).

>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 labora- tory	Mark	Report	No.
PVC-resistant	HESSE	Hesse-08		
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	Peprüt		
Saliva and sweat resistance according to DIN 53160 Parts 1 and 2: no discolouration (Level 5)	HESSE	Hesse-Os Peprült		
DIN 68861-Part 1B (Furniture surfaces; Behaviour under chemical demands)	HESSE	Hesse-Quit		

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.

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