Technical information

Hesse PU DECORATIVE METAL Base DE 48219-0901

Mixing ratio (by volume): 4 : 1 PU DECORATIVE METAL Hardener DR 4008

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>Product description

The two-component, light fast base coat PU DECORATIVE METAL DE 48219-0901 is clear and can be mixed with selected Hesse metal powders depending on the desired surface and effect. Furthermore, the different metal powders can be combined in a lacquer/hardener mixture. This allows a large and individualized degree of design freedom when planning and designing this particular surface. PU DECORATIVE-METAL is also IMO-certified.

>Areas of application

For all interior fittings, for yachts and for coating furniture.

>Surface Preparation

Surface preparation	Clean, dry wood, depending on species and application method. Perform cleaning by sanding on foil or melamine before coating.
Substrate sanding grits from-to	220 - 280

>Finishing

Finishing	DE 4500x(gloss level)-0016

>Times

Usage time	1 hour at 20 °C
Pot life	90 min / 20 °C
Drying	24 h / 20 °C
Stackable after	> 24 h / 20 °C
Complete drying	7 d / 20 °C

>Application

Application	Nozzle size in mm	Spray pressure in bar
Manual application -all		
Rolling		
Spreading		
Spraying		
Compressed air spraying	1,8 - 2,0	1,8 - 2,0

>Processing instructions

Mix base lacquer with hardener at first, afterwards add metal powder gravimetrically with 80 parts of metal powder to 20 parts lacquer/hardener mixture and stir in thoroughly without lumps. Apply the mixture in several layers with short initial drying with in total 800 - 1200 g/m². If required, individual decors can be designed (intermediate drying 30 - 60 min / 20 °C) by additional subsequent manual application. The maximum total wet film application amount, if used as flame-retardant coating material for seagoing vessels, is 1000 g/m². Substrate treatment: pre-sanding of primer or other substrate materials with grit 220 - 280. For direct coatings or on cleaned or sanded foils, please apply a test coating to check the adhesion!**For more detailed information on the product and methods of using PU DECORATIVE-METAL, please visit our website and click Service / Technical Descriptions / Documents / PU DECORATIVE-METAL.**

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Flow time (+/- 15 %)	28 s / DIN 53211 - 6 mm
Appearance	colourless
Density series kg/l	0.989
Form of delivery	fluid
Non-volatile content series %	41
VOC EU %	59 %
VOC FR	C
Storage temperature	16 - 25 °C
Shelf life in weeks	52
Working temperature	20 °C
Mixing ratio (by volume)	4 : 1 PU DECORATIVE METAL Hardener DR 4008
Mixing ratio (gravimetric)	100 : 25 PU DECORATIVE METAL Hardener DR 4008

>Ordering information

Order number	Gloss level 60° (Gloss)	Container Size
DE 48219-0901	-	1 l, 5 l, 25 l

>Hardeners

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

>Thinners

Order number	Product description	Container Size
DV 4966	PU DECORATIVE METAL 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

>Equipment cleaner

Order number	Product description	Container Size
NV 395	Cleaning thinner	5 l, 15 l, 25 l
RV 1	Cleaning thinner	5 l, 15 l, 25 l

>Supplementary products

Order number	Product description	Container Size
ZD 3136	PU DECORATIVE-METAL copper	5 kg
ZD 3137	PU DECORATIVE-METAL bronze	5 kg
ZD 3138	PU DECORATIVE-METAL brass	5 kg
ZD 3151	PU DECORATIVE-METAL zinc	5 kg
ZD 2690	PU DECORATIVE-METAL iron	5 kg
DZ 4994-0001	PU Effect agent	1 l, 5 l, 20 l
DZ 4994-0002	PU Effect agent	1 l, 5 l, 20 l

>Particular instructions

This product may only be combined with other approved and technically suitable products when it is being used as a flame-retardant coating material 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 choice of workpieces, preparation of the substrate, mixture and processing of the individual components and subsequent treatment of the coated surfaces require special knowledge. Your local sales representative will be happy to advise you. Pre-priming is possible depending on the required finish and carrier material, e.g. using DP 4755-9343 and DP 4791-9343 / DP 491-9343. Metals and metallic surfaces are subject to natural oxidation which may result in a change of colour. For cleaning and care we recommend the products indicated in our presentation. Other polishing and care products may cause changes in colour tone and effect. Coating after > 2 d with PU Cellulose lacquer will prevent oxidation and finger marks. Remove metal abrasion, waxes and polishing residues using special cleaner! **“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

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 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.	116.390 164.112/ EC0736/116.390
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	ChemVoC FarbV Decopaint fähig		
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	Hesse-QS geprüft		
PVC-resistant	HESSE	Hesse-QS geprüft		

>Particular properties and/or testing standards

Test standard / basis	Testing laboratory	Mark	Report	No.
Saliva and sweat resistance according to DIN 53160 Parts 1 and 2: no discolouration (Level 5)	HESSE			
DIN 68861-Part 1B (Furniture surfaces; Behaviour under chemical demands)	HESSE			