Technical information

Hesse 2C HYDRO Filler HDP 5640-9343 Mixing ratio (by volume): 7 : 1 HYDRO Hardener HDR 5081



>Product description

Pigment filler HDP 5640-9343 is an IMO-certified 2C primer with a broad field of application and is especially suitable for highly durable surfaces, such as those in wet rooms. Its filling power and thixotropy make this HYDRO-acrylate product especially easy to use. Our Hesse 2C HYDRO Pigment filler can be machine sanded and can subsequently be coated with all suitable Hesse lacquer systems. The product is certified as flame retardant to DIN 4102 B1 and additionally classified under DIN EN 13501-1.

>Areas of application

For all interior designs, ideal for heavily used surfaces such as in kitchens, bathrooms and offices. And throughout residential settings, for instance for tables and sideboards; on a wide selection of wood species, on plywood, MDF, and on the edges of MDF. Also for stairs and handrails.

>Surface Preparation

Surface preparation	Clean, well-seasoned wood, or clean, suitable MDF or plywood base, free from oil, grease, wax and silicones. Sanded as prescribed and free from sanding dust. Depending on the kind of wood and the desired surface effect: graduated raw wood sanding with grit size 120 - 220 and subsequent dedusting. The quality of the wood sanding is a decisive factor for the quality of the final surface. For foil substrates: suitable foil: sanding with grit size 320 - 400 and subsequent dedusting and degreasing, if necessary. The foil quality and the quality of the foil sanding are decisive factors for the quality of the final surface.
Substrate sanding grits from-to	120 - 400
Lacquer sanding (grit) from - to	280 - 400

>Finishing

Finishing Recoatability: Can be coated over after sufficient drying time and intermediate sanding, e.g. with HB 65285-(colour tone), HDB 54705-(colour tone).

>Times	
Usage time	2 h / 20 °C
Working Temperature Range	18 - 22 °C
conditions of transport	10 - 30 °C
Pot life	2 h / 20 °C
Drying	5 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				
Airless	0,23 - 0,38	100 - 120		
Air mix	0,23 - 0,38	60 - 100	1,5 - 2,5	
Compressed air spraying	1,5 - 2,0	2,5 - 4		

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>Processing instructions

Add hardener slowly whilst stirring. Adjust the spray viscosity with water if required. Maximum additive volume 5 %. The hardener must always be added before thinning! Never store product mixed with hardener in closed containers. Subsequent coating: after sufficient drying and sanding back, if required, apply another coat of the same product or suitable HYDRO or PU products. Clean tools with water. For removal of dried lacquer residues use Hesse HYDRO Cleaning agent HV 6917. In case of combined coatings (HYDRO- and solvent based lacquers) rinse application tools with Hesse HYDRO Reversing agent HV 6904. When directly coating cleaned or sanded foils, please apply a test coat to check the bonding!

>Te	echn	ical	data

Flow time (+/- 15 %)	75 s / DIN 53211 - 4 mm
Appearance	opaque
Decopaint basis	WB
Decopaint category	J
Density series kg/l	1.377
Yield per coat	8 - 14 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 %	60
VOC EU %	3 %
VOC FR	A+
Working Temperature Range	18 - 22 °C
Storage temperature	10 - 30 °C
Shelf life in weeks	26
conditions of transport	10 - 30 °C
Working temperature	20 °C
Number of coats (max)	3
Amount per layer (minimum)	100 g/m²
Amount per layer (max)	180 g/m²
Total application volume	450 g/m²
Mixing ratio (by volume)	7 : 1 HYDRO Hardener HDR 5081
Mixing ratio (gravimetric)	100 : 10 HYDRO Hardener HDR 5081

>Ordering information

Order number	Colour tone	Gloss level 60° (Gloss)	Container Size
HDP 5640-9343	White	-	7 kg, 25 kg

>Hardeners

Order number	Product description	Container Size
HDR 5081	HYDRO Hardener	0.5 l, 1 l, 2.5 l, 15 l

>Equipment cleaner

Order number	Product description	Container Size
HV 6917	HYDRO Cleaning agent	1 l, 5 l, 25 l
HV 6904	HYDRO Reversing agent	0.25 l, 1 l, 5 l, 25 l

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>Particular instructions

This product must only be combined with other approved and technically suitable products when used as a flame retardant coating material for seagoing vessels according to the latest version of SOLAS 74/88 Reg. 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 maximum application amount in wet film when using this product as a flame retardant coating material for seagoing vessels is 140 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

Kitchen furniture, MDF white, semi matt Sanding: grit 220 - 280 with subsequent dust removal. Basecoat: 2 x 130 - 150 g/m², HYDRO-PU Isolation primer HDP 5640-9343, mixing ratio (by volume) 7 : 1 with HYDRO-PU Hardener HDR 5081. Intermediate drying: at least 4 h / at 20 °C, better 16 h / at 20 °C room temperature and with adequate air circulation. Intermediate cutting back: in stages through grits 240 - 320 with subsequent dust removal. Finishing coat: 1 x 110 - 130 g/m² Hesse HYDRO-PU Color HDB 54705-9010, mixing ratio (by volume) 5 : 1 with HYDRO-PU Hardener HDR 5093. Packable: after drying for at least 16 h / 20 °C room temperature and with adequate air circulation.

>General information

With MDF coatings, you can avoid painting faults and edge breaks if you observe the following: Selection of a suitable MDF quality for the area of application, see manufacturer data on EU standard EN 622-5, pt. 4 Test method EN 317 (requirements on thickness swelling). Ideal panel moisture 5 - 7 %. If possible coat the MDF all around, the backs should at least receive a clear coating. Avoid sharp edges and cutaways, round-off wherever possible. Coat edges and cutaways 2x with primers, do not sand through, if need be, prime again. Thick boards that have been created by aluing together several thinner boards are, due to the variance in tension, susceptible to edge ridging. It is better to select a single MDF board of the appropriate thickness. Panels that have been glued together should always be sanded flat at the edges and colourlessly pre-insulated. Any water introduced by gluing must be allowed to evaporate prior to coating. Store primer-coated surfaces in an air conditioned location and apply the final coat in a timely manner. 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!

>Particular properties and/or testing standards

Test standard / basis	Testing labora-	Mark	Report	No.
	tory			
EC type examination certificate (module B);	Trade associa-	8 A A	Approval No.	116.437
coating agent for seagoing vessels according	tion transport	YAUAP	U.S. Coast	164.112/
to IMO Resolution MSC.307(88)-(FTP-Code	and traffic; Ship		Guard Ap-	EC0736/
2010).	Safety Division,		proval No.	116.437
	Hamburg	- 0 - 0		



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>Particular properties and/or testing standards

Test standard / basis	Testing labora- tory	Mark	Report	No.
Product meets the requirements of sol- vent based paints and coatings regulation - ChemVOCFarbV (German ordinance on sol- vent-based paints and varnishes) - according to the national implementation of 2004/42/ EG ("Decopaint Directive ").	HESSE	ChemVoC FarbV Decopaint fähig		
Classification of fire behaviour under DIN EN 13501-1 on validated substrate materials	MPA-Stuttgart	MPA	Classifica- tion:	C-s1, d0 (HDB 54705- (colour tone))

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.