HEMPEL'S DIAMOND VARNISH 05140

BASE 05149 with CURING AGENT 95370

Description: HEMPEL'S DIAMOND VARNISH is a clear non-yellowing two-component polyurethane varnish. It gives a durable, mirror like finish, resistant to weathering.

Recommended use: Above the waterline, interior and exterior, on teak, plywood and other wood which does not "work" too much.

Availability: Subject to confirmation.

PHYSICAL CONSTANTS:

Colours/Shade nos:	Transparent/00000
Finish:	High-gloss
Volume solids, %:	47 ± 1
Theoretical spreading rate:	11.8 m^2/litre - 40 micron 471 sq.ft./US gallon - 1.6 mils
Flash point:	35°C/95°F
Specific gravity:	1.1 kg/litre - 9.2 lbs/US gallon
Dry to touch:	6-8 hours at 20°C/68°F 12-16 hours at 10°C/50°F
Dry to sand:	24 *(app)* hours at 20°C/68°F 48 *(app)* hours at 10°C/50°F
Fully cured:	7 days at 20°C/68°F 14 days at 10°C/50°F
V.O.C.:	490 g/litre - 4.1 lbs/US gallon

The physical constants stated are nominal data according to the HEMPEL Group's approved formulas. They are subject to normal manufacturing tolerances and where stated, being standard deviation according to ISO 3534-1.

APPLICATION DETAILS:

Mixing ratio for 05140:	Base 05149 : Curing agent 95370 2 : 1 by volume			
Application method:	Conventional spray 08510 (15-30%)	Brush 08710 (5%)		
	Airspray HVLP:	Conventional Gravity feed:	Conventional Suction feed:	Conventional Pressure feed:
Fluid tip:	1.2-1.5 mm	1.4-1.6 mm	1.6-1.8 mm	1.0-1.2 mm
Air pressure	0.7 bar at nozzle	3-4 bar	3-4 bar	4-6 bar
	(Spray data is indicative and subject to adjustment).			
Spray viscosity (20°C/68°F):	DIN 4: 17-18 seconds FORD 4: 17-19 seconds ANOR 4: 19-21 seconds			
Thinner (max.vol.):	HEMPEL'S THINNER 08510 or HEMPEL'S THINNER 08710			
Pot life:	5 hours (20°C/68°F) 10 hours (10°C/50°F)			
Cleaning of tools:	HEMPEL'S THINNER 08710			
Indicated film thickness, dry:	40 micron/1.6 mils			
Indicated film thickness, wet:	100 micron/4 mils			
Recoat interval, min:	16 hours (20°C/68°F) 32 hours (10°C/50°F)			
Recoat interval, max:	5 days (20°C/68°F) *(See REMARKS overleaf)* 10 days (10°C/50°F) *(See REMARKS overleaf)*			

Safety: Handle with care. Before and during use, observe all safety labels on packaging and paint containers, consult HEMPEL Material Safety Data Sheets and follow all local or national safety regulations. Avoid inhalation, avoid contact with skin and eyes, and do not swallow. Take precautions against possible risks of fire or explosions as well as protection of the environment. Apply only in well ventilated areas.

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SURFACE PREPARATION:	**New wood (except plywood and teak):** Sanding (remove dust). Apply one coat of HEMPEL'S DIAMOND VARNISH thinned with 20-40% THINNER 08710. Apply 3 coats of HEMPEL'S DIAMOND VARNISH. Add thinner to assist application if necessary. For the best results, sand down with a wet fine sandpaper and dust off between coats for a smooth finish. **Plywood:** Sanding (remove dust). Seal off with HEMPADUR SEALER 599 (avoid formation of a continuous layer on the surface). Continue as for other types of new wood. **Teak:** Sanding (remove dust). Degrease the surface thoroughly with HEMPEL'S DEGREASER 99611. Continue as for other types of new wood. **Previously varnished wood:** If the old varnish of other type is hard and intact, and more than one year old, it may be possible to apply HEMPEL'S DIAMOND VARNISH on top. It is advisable first to try on a small area. Wash the surface with a solution of one part ammonia water in six parts of fresh water. Do not use detergents unless they are removed completely, as otherwise residues may have an adverse influence on the curing properties and the adhesion of the varnish. Sand the old varnish. Touch up bare spots with HEMPEL'S DIAMOND VARNISH diluted 25-50% with HEMPEL'S THINNER 08710. Proceed as for new wood, omitting the first thinned coats. **Note:** Ammonia water may discolour oak, mahogany and teak.
APPLICATION CONDITIONS:	The surface must be completely clean and dry. Do not apply in strong sunlight, on hot surfaces, under humid conditions or at temperatures below 2°C/36°F. The temperature of the surface must be above the dew point to avoid condensation. High relative humidity or condensation within the first 24 hours after application at 20°C/68°F - 48 hours at 10°C/50°F, may impair the film formation. The moisture content of the wood should not exceed 16%. In confined spaces provide adequate ventilation during application and drying.
SUBSEQUENT COAT:	None.
REMARKS:	If a brush is used, best results are obtained with a flat varnish brush. After mix let the product rest 5-10 minutes to release the air before applying. **Note:** CURING AGENT 95370 reacts with humidity in the air which can render it unfit for use. Do not open can until immediately before use. Also traces of water in the mixed varnish will shorten the pot life and give film defects. When diluting with THINNER stir carefully, do not shake the can as this will produce air bubbles in the varnish. If only part of the CURING AGENT is to be used, do not remove the lid, but make two holes in the bottom of the can. After use, close the holes tightly with tape. The cans should be opened with care as there may be risk of overpressure, especially in the can containing the CURING AGENT. Do not fix the lid on cans containing mixed paint. The amount of thinner depends on the application conditions: Temperatures, ventilation and substrate. It is very important that the surface is absolutely clean before overcoating. In case of doubt and/or in case of long recoating intervals it is recommended to sand the old surface.
Note:	**The information given in the Product Data Sheet is intended for commercial use.**
ISSUED BY:	HEMPEL A/S - 0514000000CS003

This Product Data Sheet supersedes those previously issued.
For explanations, definitions and scope, see "Explanatory Notes" in the HEMPEL Book.
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