



Product Data

HEMPADUR® SEALER 05990

BASE 05999 with CURING AGENT 95040

Description: HEMPADUR SEALER 05990 is a low viscosity, two pack epoxy varnish with good penetration properties.

Recommended use: For saturation of well cleaned concrete surfaces before application of pigmented paints. Must be applied in such an amount that the surface is just saturated. The surface should not appear "glossy" in any way.

Service temperatures: Related to substrate and subsequent coat.

Availability: Part of Group Assortment. Local availability subject to confirmation.

PHYSICAL CONSTANTS:

Colours/Shade nos:	Transparent/00000
Finish:	Flat
Volume solids, %:	29 ± 1
Theoretical spreading rate:	Not relevant (See REMARKS overleaf)
Flash point:	25°C/77°F
Specific gravity:	0.9 kg/litre - 7.5 lbs/US gallon
Dry to touch:	3-4 hours at 20°C/68°F
Fully cured:	7 days at 20°C/68°F
V.O.C.:	610 g/litre - 5.1 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 05990:	Base 05999 : Curing agent 95040 4 : 1 by volume
Application method:	Airless spray Brush
Thinner (max.vol.):	08450 (up to 5%) 08450 (up to 5%)
Pot life:	8 hours (20°C/68°F)
Nozzle orifice:	.017"-.021"
Nozzle pressure:	100 bar/1450 psi (Airless spray data are indicative and subject to adjustment)
Cleaning of tools:	HEMPEL'S TOOL CLEANER 99610
Indicated film thickness, dry:	Not relevant
Indicated film thickness, wet:	Not relevant (See REMARKS overleaf)
Recoat interval, min:	4 hours (20°C/68°F)
Recoat interval, max:	None (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.



HEMPADUR SEALER 059990

SURFACE PREPARATION:	All possible slip agent, oil, grease and other contaminants must be removed by eg volatilizing by flame cleaning or treatment with suitable detergent. Last mentioned in the following way: Saturation of the surface with fresh water. Washing with detergent followed by fresh water hosing. Depending on construction and purpose, abrasive blast, high pressure water jet or treat the concrete with power tools to obtain a rough and firm surface free of scum layer and other contamination. Remove dust and loose material. If mechanical treatment is impossible, the surface may be treated with acid etching. For this purpose an approx. 5% w/w nitric or phosphoric acid solution is recommended. Note: Strong acids, take necessary precautions, make sure that safety regulations are obeyed! Prior to etching the concrete should be saturated with fresh water to prevent acid corrosion of the reinforcement bars. Leave the acid to act for 3-4 minutes and hose down the surface with fresh water - preferably first a 5% w/w sodium hydroxide solution - and scrub carefully. After that the surface must dry homogeneously and appear as an even, rough surface free of a loose outer layer. The surface must have a pH reaction of between 6.5 - 8.0. If any of these conditions are not fulfilled, the process must be repeated. The surface must be dried with good ventilation for at least 2 days (65% relative humidity and 20°C/68°F). The pretreatment is controlled by scraping with a strong knife. The surface shall feel solid and hard, and the knife must only leave a clear scratch mark.
APPLICATION CONDITIONS:	The concrete must be fully cured, eg 28 days for normal Portland cement, and completely dry with a humidity content in the surface below 4%. The concrete must also be controlled for absence of capillary water action or for subsoil water. Use only where application and curing can proceed at temperatures above 10°C/50°F. Apply only on a dry surface, free of dust, grease, oil and other contamination - as described above. Strongly absorbing surfaces may need repeated treatment. In any case a glossy surface must not appear and such a surplus of HEMPADUR SEALER 05990 must be removed by sanding, abrasive sweep-blasting or similar methods before painting takes place. In confined spaces provide adequate ventilation during application and drying.
SUBSEQUENT COAT:	According to specification.
REMARKS:	
Film thicknesses/ consumption:	HEMPADUR SEALER 05990 is used for saturation of the absorbent concrete surface. Application should be initiated by assessing the degree of dilution in order to obtain a correct result. The actual amount of thinner required will depend on temperatures, the surface and type of the concrete and the actual application technique. Furthermore, a practical theoretical spreading rate cannot be calculated. For practical purposes, approx. 10 m ² /litre (410 sq.ft./US gallon) is indicated depending on the surface roughness, porosity of the concrete, and the application method.
Appearance:	In any case a glossy surface must not appear and such a surplus of HEMPADUR SEALER 05990 must be removed by sanding, abrasive sweep-blasting or similar methods before painting takes place.
Note:	HEMPADUR SEALER 05990 is for professional use only.
ISSUED BY:	HEMPEL A/S - 0599000000C0005

*This Product Data Sheet supersedes those previously issued.
For explanations, definitions and scope, see "Explanatory Notes" in the HEMPEL Book.
Data, specifications, directions and recommendations given in this data sheet represent only test results or experience obtained under controlled or specially defined circumstances. Their accuracy, completeness or appropriateness under the actual conditions of any intended use of the Products herein must be determined exclusively by the Buyer and/or User.
The Products are supplied and all technical assistance is given subject to HEMPEL's GENERAL CONDITIONS OF SALES, DELIVERY AND SERVICE, unless otherwise expressly agreed in writing. The Manufacturer and Seller disclaim, and Buyer and/or User waive all claims involving, any liability, including but not limited to negligence, except as expressed in said GENERAL CONDITIONS for all results, injury or direct or consequential losses or damages arising from the use of the Products as recommended above, on the overleaf or otherwise.
Product data are subject to change without notice and become void five years from the date of issue.*