
HEMPADUR SPEED-DRY ZP 500: BASE 17509: CURING AGENT 98415

Description:	HEMPADUR SPEED-DRY ZP 500 is a two-component epoxy paint, which combines high volume solids with a short drying time and optimized properties for shop application of full coating systems. Contains zinc phosphate for better corrosion protection.
Recommended use:	HEMPADUR SPEED-DRY ZP 500 is suitable for onshore corrosion protection of new-build steel constructions where fast to handle and short overcoating times are required, such as steel for factory buildings, stadiums, exhibition halls, airports, power plants, refineries, chemical and petrochemical plants.
Service temperature:	Maximum, dry exposure only: 140°C/284°F
Certificates/Approvals:	Complies with European Fire Standard EN 13501-1; classification B-s1, d0.
Availability:	Not included in Group Assortment. Availability subject to special agreement.

PHYSICAL CONSTANTS:

Shade nos/Colours:	17330* / Grey. (see REMARKS overleaf)
Finish:	Flat
Volume solids, %:	75 ± 1
Theoretical spreading rate:	6 m ² /l [240.6 sq.ft./US gallon] - 125 micron/5 mils
Flash point:	26 °C [78.8 °F]
Specific gravity:	1.6 kg/litre [13.2 lbs/US gallon]
Surface-dry:	1 approx. hour(s) 20°C/68°F
Dry to handle:	3.5 approx. hour(s) 20°C/68°F
Fully cured:	7 day(s) 20°C/68°F
VOC content:	235 g/l [2 lbs/US gallon]
Shelf life:	3 years for BASE and 1 year (25°C/77°F) for CURING AGENT from time of production. <i>*other shades according to assortment list.</i>

The physical constants stated are nominal data according to the HEMPEL Group's approved formulas.

APPLICATION DETAILS:

Version, mixed product:	HEMPADUR SPEED-DRY ZP 500
Mixing ratio:	BASE 17509: CURING AGENT 98415 2 : 1 by volume Stir CURING AGENT before adding it to the BASE.
Application method:	Airless spray / Brush
Thinner (max.vol.):	HEMPEL'S THINNER 08450 <5% depending on purpose (see REMARKS overleaf)
Pot life:	1.5 hour(s) 20°C/68°F
Nozzle orifice:	0.019 - 0.021 "
Nozzle pressure:	225 bar [3262.5 psi] (Airless spray data are indicative and subject to adjustment)
Cleaning of tools:	HEMPEL'S TOOL CLEANER 99610
Indicated film thickness, dry:	70-150 µm/2.8-6 mils
Indicated film thickness, wet:	100-200 micron/4-8 mils
Overcoat interval, min:	see REMARKS overleaf
Overcoat interval, max:	see REMARKS overleaf

Safety:	Handle with care. Before and during use, observe all safety labels on packaging and paint containers, consult HEMPEL Safety Data Sheets and follow all local or national safety regulations.
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SURFACE PREPARATION:

Steel work: The steel surface shall be thoroughly prepared so that the coating achieves an even distribution at the specified nominal dry film thickness (please refer to the specifications). The final steel condition including welds and edges shall conform to preparation grade P2 (ISO 8501-3).

New steel: Abrasive blasting to Sa 2½ (ISO 8501-1:2007). For temporary protection, if required, use a suitable shopprimer. All damage of shopprimer and contamination from storage and fabrication should be thoroughly cleaned prior to final painting. For repair and touch-up use: HEMPADUR SPEED-DRY ZP 500.

Maintenance: Remove oil and grease etc. thoroughly with suitable detergent. Remove salts and other contaminants by high pressure fresh water cleaning. Remove all rust and loose material by wet or dry abrasive blasting or power tool cleaning. Feather edges to sound and intact areas. Dust off residues. Touch up to full film thickness. After wet abrasive blasting hose down the surface with fresh water and allow drying.

APPLICATION CONDITIONS:

Apply only on a dry and clean surface with a temperature above the dew point to avoid condensation. Use only where application and curing can proceed at temperatures above: -10°C/14°F. The temperature of the paint itself should be: 15-25°C/59-77°F. In confined spaces provide adequate ventilation during application and drying. Thinning may be necessary in the case of very long spray hoses and/or paint temperatures below: 15°C/59°F. This will cause lower film build and longer drying time.

PRECEDING COAT:

None, or as per specification.

SUBSEQUENT COAT:

None, or as per specification.

REMARKS:

Colours/Colour stability:

Has a tendency to yellow after application. This will have no influence on the performance.

Weathering/service temperatures:

The natural tendency of epoxy coatings to chalk in outdoor exposure and to become more sensitive to mechanical damage and chemical exposure at elevated temperatures is also reflected in this product.

Application(s):

Irregular surfaces: Similar to other very fast drying/curing epoxies; this product is sensitive towards the geometry of irregular surfaces. Special care should be taken in relation to irregular surfaces (welding seams, undercuts, corners etc.) as application with an excessive film thickness may result in cracking.

Film thicknesses/thinning:

Film thickness:

The recommended nominal dry film thickness (NDFT) is 70-150 µm/2.8-6 mils.

On flat/regular surfaces the NDFT can be extended to 200 µm/8 mils.

Overthickness on overlapping areas, corners, welding seams, etc should be less than 300 µm/12 mils DFT.

Thinning:

Selection of proper thinner is related to application conditions. Recommended thinner(s): HEMPEL'S THINNER 08450 and HEMPEL'S THINNER 08700.

Shades:

The product is also available in a Micaceous Iron Oxide (MIO) pigmented shade (Shade no. 12430 – reddish grey).

Overcoating:

Overcoating intervals related to later conditions of exposure: If the maximum overcoating interval is exceeded, roughening of the surface is necessary to ensure intercoat adhesion. Before overcoating after exposure in contaminated environment, clean the surface thoroughly with high pressure fresh water hosing and allow drying.

A specification supersedes any guideline overcoat intervals indicated in the table.

Environment	Atmospheric, medium					
	-10°C (14°F)		0°C (32°F)		20°C (68°F)	
	Min	Max	Min	Max	Min	Max
HEMPADUR	18 h	Ext.*	9 h	Ext.*	2 h	Ext.*
HEMPATHANE	18 h	90 d	9 h	45 d	2 h	10 d

NR = Not Recommended, Ext. = Extended, m = minute(s), h = hour(s), d = day(s)

Overcoating note:

***Depending on actual local conditions, the long maximum overcoating intervals may vary. Contact HEMPEL for more information.**

In case of general maintenance involving epoxy systems of high total dry film thickness, the minimum overcoating interval may advantageously be doubled up.

For mild atmospheric exposure overcoating with HEMPADUR and HEMPATHANE qualities has no maximum. For other qualities please contact HEMPEL.

A completely clean surface is mandatory to ensure intercoat adhesion, especially at long overcoating intervals. Any dirt, oil, grease, and other foreign matter must be removed with suitable detergent followed by (high pressure) fresh water cleaning. Salts to be removed by fresh water hosing.

Any degraded surface layer, as a result of a long exposure period, must be removed as well.

HEMPADUR SPEED-DRY ZP 500 For professional use only.

Note:

ISSUED BY:

HEMPEL A/S

1750017330

Product Data

HEMPADUR SPEED-DRY ZP 500



This Product Data Sheet supersedes those previously issued.

For explanations, definitions and scope, see "Explanatory Notes" available on www.hempel.com. 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.