

Hempadur Speed-Dry ZP 500

Product characteristics

Description

Hempadur Speed-dry ZP 500 is an epoxy paint which combines high volume solids with a short drying time and optimised properties for shop application of full coating systems. It contains zinc phosphate for better corrosion protection.

Recommended use

Hempadur Speed-dry ZP 500 as a primer or intermediate coat is suitable for onshore corrosion protection of new-build steel and 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 the European Fire Standard EN 13501-1, reaction to fire classification, when used as part of a predefined paint system. B-s1, d0.

Product safety

Flash point 26°C [79°F]

VOC content mixed product

Legislation	Value
EU	235 g/L [1.96 lb/US gal]
US (coatings)	271 g/L [2.26 lb/US gal]
US (regulatory)	272 g/L [2.27 lb/US gal]
China	271 g/L [2.26 lb/US gal]

According to specific legislation, see details in the Explanatory Notes available at Hempel website, hempel.com or at your local Hempel website. VOC values may vary with shade, please consult the Safety Data Sheet, section 9.

Handling

Handle with care. Before and during use, observe safety labels on packaging and paint containers and follow all local and national safety regulations. Always consult Hempel's Safety Data Sheet for this product along with the Product Data Sheet.

For professional use only.

Product data

Product code

17500

Product components

Base 17509

Curing Agent 98415

Standard shade / code

Grey 17330

Gloss

Flat

Volume solids

75 ± 2%

Specific gravity

1.6 kg/L [13 lb/US gal]

Reference dry film thickness

125 micron [4.9 mils]

Micaceous iron oxide (MIO) shade / code

Metallic grey 12430

Gloss

Flat

Volume solids

75 ± 2%

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Specific gravity

1.6 kg/L [13 lb/US gal]

Reference dry film thickness

125 micron [4.9 mils]

Surface preparation

Cleanliness

- Remove oil, grease and other contaminants by suitable detergent cleaning.
- Remove salts, detergents and other contaminants by high pressure fresh water cleaning.

New build:

- Abrasive blasting to min. Sa 2½ (ISO 8501-1) / SP 10 (SSPC).
- Remove dust, blast media and loose materials.

Maintenance and Repair

- Spot abrasive blasting to min. PSa 2 (ISO 8501-2) / SP 6 (SSPC).
- Water jetting to min. Wa 2 (ISO 8501-4).
- Flash rust degree of maximum FR M (ISO 8501-4).
- Minor areas can be cleaned by power tool to St 3 provided the surface is roughened and not polished.
- Feather edges to sound surrounding coating.
- Remove dust, blast media and loose materials.

Consult Hempel's separate Surface Preparation Guidelines for more details.

Application

Mixing ratio

Base 17509 : Curing Agent 98415
(2 : 1 by volume)

Stir well before use. It is recommended to use fixed volumes/can size for multi-component products.

Thinner

Hempel's Thinner 08450

Cleaner

Hempel's Tool Cleaner 99610

Pot life
Product temperature
20°C
 [68°F]

Pot life	90 min
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Application method

Tool	Thinning max vol.	Application parameters
Airless spray	5%	Nozzle pressure: 225 bar [3300 psi] Nozzle orifice: 0.019-0.021"
Brush	5%	Not Applicable.

If brush or roller application is used, more coats will be necessary to achieve the specified dry film thickness. Spray data are indicative and subject to adjustment. Pressure is for a material temperature of 20°C [68°F].

Film thickness

Specification range	Low	High	Recommended
Dry film thickness	70 micron [2.8 mils]	150 micron [5.9 mils]	125 micron [4.9 mils]
Wet film thickness	90 micron [3.5 mils]	200 micron [8 mils]	170 micron [7 mils]
Theoretical spreading rate	11 m²/L [450 sq ft/US gal]	5 m²/L [200 sq ft/US gal]	6 m²/L [240 sq ft/US gal]

Product may be specified in another film thickness than indicated depending on purpose and area of use. This will alter spreading rate, drying and curing time and overcoating interval. For best performance, avoid excessive film thickness. Overthickness should be closely controlled and never locally exceed 300 micron [12 mils] DFT. On irregular surfaces it is recommended to employ special care in avoiding over application.

Application conditions

- Surface temperature must be above -10°C [14°F] during application and curing.
- To avoid condensation, apply on a clean and dry surface with a temperature that is at least 3°C [5°F] above the dew point.
- Temperature of product must be above 15°C [59°F] during application.

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Drying and overcoating

Product compatibility

- Previous coat: None or according to Hempel's specification.
- Subsequent coat: None or according to Hempel's specification.

Drying time

Surface temperature		20°C [68°F]
Touch dry	min	60
Hard dry	hours	3½

Determined for dry film thickness 125 micron [4.9 mils] at standard conditions, see Hempel's Explanatory Notes for details.

Overcoating

Hempel's specification supersedes any guidelines indicated in the overcoating table

Quality name		-10°C [14°F]	0°C [32°F]	20°C [68°F]
Atmospheric medium				
Hempadur Quattro XO 17870	Min	18 h	9 h	2 h
	Max	Ext*	Ext	Ext
Hempathane HS 55610	Min	18 h	9 h	2 h
	Max	90 d	45 d	10 d

Drying conditions

- To obtain the drying time stated, it is important to maintain sufficient ventilation during application, drying and curing.

Overcoating details

- If the maximum overcoating interval is exceeded, roughening of the surface is necessary to ensure intercoat adhesion.
- The surface must be clean before overcoating.

Other remarks

- Epoxy coats have an inherent tendency of chalking in outdoor exposure. This does not affect the performance of the coating.
- Hempel's Specification supersedes any recommendations given in the Product Data Sheets.

Storage

Shelf life

Ambient temperature	25°C [77°F]	35°C [95°F]
Base	36 months	24 months
Curing Agent	12 months	8 months

Shelf life from date of production, when stored in original, unopened containers. Thereafter, the product quality must be re-inspected. Always check the best before date or expiry date on the label.

Storage conditions

- Product must be stored according to local legislation, at maximum 40°C [104°F], without direct sunlight and protected from rain and snow.

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Additional documents

Additional information is available at the Hempel website [hempel.com](https://www.hempel.com) or at your local Hempel website:

- Explanatory Notes explaining the fields in this Product Data Sheet.
- Surface Preparation Guidelines.
- Application Guidelines for different application methods.
- General Application Guidelines

This Product Data Sheet ("PDS") relates to the supplied product ("Product") and is subject to updating from time-to-time. Accordingly, the buyer/applicator should have regard to the PDS supplied together with the relevant batch of the Product (and not an earlier version). In addition to the PDS, the buyer/applicator may receive some or all of the following specifications, statements and/or guidelines as listed below or as are available from the Hempel website under 'Products' at www.hempel.com (the "Additional documents"):

No.	Document description	Location/comments
1.	Technical Statement	One-off specific advice provided on request for specific projects
2.	Specification	Only issued for specific projects
3.	PDS	This document
4.	Explanatory Notes to the PDS	Available at www.hempel.com and contain relevant information about the Product testing parameters
5.	Application Instruction	Where available, at www.hempel.com
6.	Generic technical guidelines (e.g. on application and surface preparation)	Where available, at www.hempel.com

In the event of a conflict of information between the PDS and the Additional documents, the order of priority of information shall be in the order as set out above. In such event you should also contact your representative at Hempel for clarification. Furthermore, the buyer/applicator must have full regard to the relevant Safety Data Sheet provided with each Product and which can also be downloaded from www.hempel.com.

Hempel shall not be liable for defects where the application of the Product has not been made fully in accordance with the recommendations and requirements set out in the relevant PDS and the Additional Documents. The information and terms of this disclaimer apply to this PDS, the Additional documents and any other documents supplied by Hempel in respect of the Product. In addition, the Product is supplied and all technical assistance is given subject to Hempel's General Conditions of Sale, Delivery and Service, unless otherwise expressly agreed in writing.