

Hempadur 47300

Product characteristics

Description

Hempadur 47300 is a two-component epoxy paint, which cures to a hard and tough coating with good resistance to abrasion and seawater. It contains zinc phosphate for better corrosion protection

Recommended use

As a midcoat epoxy and self-primed high performance coating systems for atmospheric exposure. Hempadur 47300 is intended to all year application down to -10°C/14°F and for in-shop applications where fast recoating and handling is required. For longer overcoating intervals, the MIO version of this product, shade 12430, is recommended. Contact Hempel for details.

Service temperature:

- Maximum, dry exposure only: 120°C [248°F].

Certificates / Approvals

- Meets requirements to NORSOK M-501 when used as part of a predefined paint system. Edition 6, System 1.
- Meets requirements to ISO 12944 when used as part of a predefined paint system. Part 6, C5.

Features

- Excellent anticorrosive and very good mechanical properties.
- Short drying time.
- Curing down to -10°C/14°F.

Product safety

Flash point 25°C [77°F]

VOC content mixed product

Legislation	Value
EU	185 g/L [1.54 lb/US gal]
US (coatings)	185 g/L [1.54 lb/US gal]
US (regulatory)	185 g/L [1.54 lb/US gal]
China	185 g/L [1.54 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. *EU Directive 2004/42/CE. 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

47300

Product components

Base 47309
Curing Agent 97301

Standard shade / code

Light grey 12170 *

Gloss

Semi-flat

Volume solids

83 ± 2%

Specific gravity

1.5 kg/L [13 lb/US gal]

Reference dry film thickness

160 micron [6.3 mils]

Micaceous iron oxide (MIO) shade / code

Metallic grey 12430

Gloss

Semi-flat

Volume solids

82 ± 2%

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Specific gravity

1.8 kg/L [15 lb/US gal]

Reference dry film thickness

160 micron [6.3 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 damaged shopprimer and any contamination prior to painting.
- Remove dust, blast media and loose materials.

Maintenance and Repair

- Abrasive blasting to min. Sa 2 (ISO 8501-1) / SP 6 (SSPC).
- Minor areas can be cleaned by power tool to St 3 provided the surface is roughened and not polished.
- Water jetting to min. Wa 2 (ISO 8501-4).
- Flash rust degree of maximum FR M (ISO 8501-4).
- Remove dust, blast media and loose materials.

Roughness

- Surface profile Medium (G) (ISO 8503-2).

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

Application

Mixing ratio

Base 47309 : Curing Agent 97301
(4 : 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
Hempel's Thinner 08450

Pot life

Product temperature **20°C**
[68°F]

Pot life 90 min

Application method

Tool	Thinning max vol.	Application parameters
Airless spray	5%	Nozzle pressure: 250 bar [3600 psi] Nozzle orifice: 0.019-0.023"
Brush	20%	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	100 micron [3.9 mils]	250 micron [10 mils]	160 micron [6.3 mils]
Wet film thickness	120 micron [5 mils]	300 micron [12 mils]	190 micron [8 mils]
Theoretical spreading rate	8.3 m ² /L [340 sq ft/US gal]	3.3 m ² /L [130 sq ft/US gal]	5.2 m ² /L [210 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.

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Application conditions

- Temperature of product must be above 15°C [59°F] during application.
- Surface temperature must be above -10°C [14°F] during application and curing.
- Surface temperature must be below 30°C [86°F] during application and curing.
- To facilitate proper application properties at low temperatures it is recommended to allow the thoroughly mixed Base and Curing Agent to prereact before application.
- 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.

Relative Humidity:

- Relative humidity must be below 90% during curing.
- Relative humidity must be below 90% during application.

Application remarks

- If brush or roller application is used, more coats will be necessary to achieve the specified dry film thickness.
- The practical consumption factor may vary depending on application conditions, equipment and workmanship.

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		-10°C [14°F]	10°C [50°F]	20°C [68°F]	30°C [86°F]
Hard dry	hours	35	7	3	2½
Fully cured	days	56	14	7	3½

Determined for dry film thickness 160 micron [6.3 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]	10°C [50°F]	20°C [68°F]
Atmospheric medium				
Hempadur 47300	18 h 90 d	9 h 90 d	4 h 60 d	2 h 30 d
Hempathane HS 55610	27 h 90 d	14 h 90 d	6 h 40 d	3 h 20 d
Atmospheric severe				
Hempadur 47300	36 h 90 d	18 h 90 d	8 h 60 d	4 h 30 d
Hempathane HS 55610	36 h 54 d	18 h 27 d	8 h 12 d	4 h 6 d

Overcoating times are indicative for products of the same generic chemistry. Consult Hempel's specification for more information.

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 dry and clean prior to application.

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.

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Storage

Shelf life

Ambient temperature	25°C [77°F]	35°C [95°F]
Base	36 months	24 months
Curing Agent	12 months	9 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.

Additional documents

Additional information is available at the Hempel website 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.