

Hempadur Ultra-Strength Fibre

Product characteristics

Description

Hempadur Ultra-Strength Fibre 47510 is a self-priming, high-build, pure epoxy coating, reinforced with patented fibre technology. It is engineered to withstand the harsh conditions of cargo holds due to the superior resistance to abrasion, impact, cracking and chemical attack. It can be applied at surface temperatures as low as -5°C [23°F] and allows for a very fast return to service due to the fast curing profile.

Recommended use

Hempadur Ultra-Strength Fibre 47510 is recommended as a heavy-duty coating for areas exposed to abrasion and aggressive corrosive climate such as hatch coamings and cargo holds of bulk carriers.

Service temperature:

- Maximum, dry exposure only: 140°C [284°F].

Certificates / Approvals

- Complies with US FDA and EU food regulations for contact with dry foodstuff. Consult Hempel for details.

Features

- Very high abrasion, impact and shooting resistance.
- Fast curing allows fast return to service.
- High film build.
- Long repair intervals.

Product safety

Flash point 25°C [77°F]

VOC content mixed product

Legislation	Value
EU	233 g/L [1.94 lb/US gal]
US (coatings)	233 g/L [1.94 lb/US gal]
US (regulatory)	233 g/L [1.94 lb/US gal]
China	233 g/L [1.94 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

47510

Product components

Base 47519
Curing agent 98510

Standard shade* / code

Brownish red 59630 **

Gloss

Semi-gloss

Volume solids

76 ± 2%

Specific gravity

1.5 kg/L [13 lb/US gal]

Reference dry film thickness

125 micron [4.9 mils]

* Other shades are available, please contact your local Hempel representative.

** Slight discolouration may occur. This does not affect the performance of the coating.

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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 2 (ISO 8501-1) / SP 6 (SSPC).
- Remove dust, blast media and loose materials.

Maintenance and Repair

- Spot abrasive blasting to min. PSa 2 (ISO 8501-2) / SP 6 (SSPC).
- Minor areas may be hand or power tool cleaned instead of abrasive blasting.
- 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 47519 : Curing agent 98510
(3 : 1 by volume)

Stir well before use.

Thinner

Hempel's Thinner 08450

Cleaner

Hempel's Tool Cleaner 99610

Pot life

Product temperature	15°C [59°F]	20°C [68°F]	25°C [77°F]
Pot life	90 min	60 min	45 min

Application method

Tool	Thinning max vol.	Application parameters
Airless spray	5%	Nozzle pressure: 250 bar [3600 psi] Nozzle orifice: 0.023-0.027"
Brush	5%	Not Applicable.

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	125 micron [4.9 mils]	150 micron [5.9 mils]	125 micron [4.9 mils]
Wet film thickness	170 micron [6 mils]	200 micron [8 mils]	170 micron [6 mils]
Theoretical spreading rate	6.1 m ² /L [250 sq ft/US gal]	5.1 m ² /L [210 sq ft/US gal]	6.1 m ² /L [250 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.

Application conditions

- Optimal paint temperature for proper mixing, pumping and spraying is: 20°C [68°F].
- 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.
- Surface temperature must be above -5°C [23°F] during application and curing.

Application remarks

- Product requires heavy duty spray equipment; spray hoses shall be as short as possible.

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Drying and overcoating

Product compatibility

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

Drying time

Surface temperature		-10°C [14°F]	0°C [32°F]	20°C [68°F]	40°C [104°F]
Surface dry	hours	28	14	2½	1½
Hard dry	hours	36	18	4	2
Fully cured	days	14	10	3	2

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		0°C [32°F]	10°C [50°F]	20°C [68°F]	30°C [86°F]
Atmospheric medium					
Hempadur Ultra-Strength Fibre	Min	18 h	8 h	4 h	3 h
	Max	28 d	28 d	14 d	10 d
Atmospheric severe					
Hempadur Ultra-Strength Fibre	Min	18 h	8 h	4 h	3 h
	Max	28 d	28 d	14 d	10 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.

Storage

Shelf life

Ambient temperature	25°C [77°F]	35°C [95°F]
Base	12 months	8 months
Curing agent	24 months	16 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 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.