

Hempadur Easy 47700

Product characteristics

Description

Hempadur Easy 47700 is a high-build, surface tolerant, pure epoxy coating which cures to a hard and tough coating with good resistance to abrasion and seawater.

Recommended use

Hempadur Easy 47700 is recommended as a self-primed, heavy-duty coating or intermediate coat for immersed and non-immersed areas exposed to abrasion and corrosive climate such as cargo holds, ship hulls, working decks or steel structures where low VOC, fast drying and high film build are required. Hempadur Easy 47700 is intended for all year application down to -10°C [14°F] and for applications where fast recoating and handling is required.

Service temperature:

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

Certificates / Approvals

- EC-type examined as a low flame spread material when used as part of a predefined paint system. Please refer to "Declaration of Conformity" on hempel.com for further details.
- Complies with US FDA and EU food regulations for contact with dry foodstuff. Consult Hempel for details.

Features

- Excellent anticorrosive properties.
- Very good mechanical properties.
- Fast drying time.
- Low VOC.
- High film build.
- Curing down to -10°C [14°F].

Product safety

Flash point 25°C [77°F]

VOC content mixed product

Legislation	Value
EU	238 g/L [1.99 lb/US gal]
US (coatings)	238 g/L [1.99 lb/US gal]
US (regulatory)	238 g/L [1.99 lb/US gal]
China	238 g/L [1.99 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

47700

Product components

Base 47709
Curing Agent 97702

Standard shade* / code

Brownish red 50630 **

Gloss

Flat

Volume solids

77 ± 2%

Specific gravity

1.5 kg/L [12 lb/US gal]

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

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

Hempadur Easy 47700

Reference dry film thickness

125 micron [5.0 mils]

Aluminium shade / code

Aluminium red 19530 *

Gloss

Please consult Hempel's Guideline on aluminium pigmented coatings.

Volume solids

68 ± 2%

Specific gravity

1.4 kg/L [11 lb/US gal]

Reference dry film thickness

125 micron [5.0 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).
- All damage of shopprimer and contamination from storage and fabrication should be thoroughly mechanically/chemically cleaned prior to final painting.
- 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 47709 : Curing Agent 97702
(4 : 1 by volume)

Stir well before use.

Thinner

Hempel's Thinner 08450

Cleaner

Hempel's Tool Cleaner 99610
Hempel's Thinner 08450

Pot life

Product temperature	10°C [50°F]	20°C [68°F]
Pot life (spray)	2 hours	1 hour
Pot life (brush)	3 hours	1½ hours

Application method

Tool	Thinning max vol.	Application parameters
Airless spray	5%	Nozzle pressure: 250 bar [3600 psi] Nozzle orifice: 0.017-0.025"
Brush/Roller	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].

Hempadur Easy 47700

Film thickness

Specification range	Low	High	Recommended
Dry film thickness	100 micron [4.0 mils]	200 micron [8.0 mils]	125 micron [5.0 mils]
Wet film thickness	131 micron [5.2 mils]	261 micron [10 mils]	163 micron [6.5 mils]
Theoretical spreading rate	7.6 m ² /L [310 sq ft/US gal]	3.8 m ² /L [155 sq ft/US gal]	6.1 m ² /L [249 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

- 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 -10°C [14°F] during application and curing.

Drying and overcoating

Product compatibility

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

Drying time

Surface temperature		-10°C [14°F]	0°C [32°F]	20°C [68°F]	40°C [104°F]
Touch dry	min	120	60	45	15
Hard dry	hours	20	10	2½	¾

Determined for dry film thickness 125 micron [5.0 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]	30°C [86°F]
Atmospheric medium					
Hempadur Easy 47700	Min	18 h	8 h	2 h	90 min
	Max	90 d	56 d	14 d	10 d
Hempathane HS 55610	Min	18 h	8 h	2 h	90 min
	Max	90 d	40 d	10 d	7½ d
Immersion					
Hempadur Easy 47700	Min	27 h	12 h	3 h	2½ h
	Max	90 d	56 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.

Hempadur Easy 47700

Storage

Shelf life

Ambient temperature	25°C [77°F]
Base	36 months
Curing Agent	12 months

Shelf life from date of production, when stored in original, unopened containers. Thereafter, the product quality must be re-inspected. Storage at elevated temperatures may reduce shelf life. For advice, please consult Hempel.

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.

Carbon Footprint

Dry film thickness	1 µm	1 mil
GWP (Global Warming Potential)	6.3 g CO ₂ e/m ²	0.033 lb CO ₂ e/ft ²

The carbon footprint is for 1 square meter / square foot of surface area with a dry film thickness of 1 micron / mil.

The scope includes raw materials, in-bound transport to the Hempel factory, Hempel manufacturing processes, and any Volatile Organic Compounds emitted during and after the application of the product.

It is calculated based on the standard shade defined in this PDS. Values may vary with shade.

Additional documents

Additional information is available at the Hempel website <https://www.hempel.com/service-and-support/technical-guidelines> or at your local Hempel website:

- Explanatory Notes for Product Data Sheet.
- Application methods.
- Substrates.
- Surface Preparation.
- Application Instruction for this product.
- Repair & maintenance.
- Inspection & quality control.

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.