

Hempadur 17630

Product characteristics

Description

Hempadur 17630 is a two-component, high-build, polyamide adduct-cured epoxy paint which cures to a hard and tough coating with good resistance to abrasion, seawater and various oils.

Complies with EU Directive 2004/42/EC, The Paints Directive on the limitation of volatile organic compounds: subcategory j.

Recommended use

As a selfprimed coating for ballast water tanks and similar. As a primer for epoxy systems for atmospheric or in-water service, eg ship hulls. Suitable for application down to 0°C/ 32°F.

Hempadur 17630 is intended for use in temperate to warm climates. For cold/temperate climates use Hempadur 17633.

Service temperature:

- Maximum, dry exposure only: 120°C [248°F].
- Maximum, in water (no temperature gradient): 40°C [104°F].
- Other liquids: Please contact Hempel.

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.

Product safety

Flash point 32°C [90°F]

VOC content mixed product

Legislation	Value	5% thinning, by volume	Limit value, phase II (2010) ^a
EU	303 g/L [2.53 lb/US gal]	331 g/L [2.76 lb/US gal]	500 g/L [4.17 lb/US gal]
US (coatings)	303 g/L [2.53 lb/US gal]	-	-
US (regulatory)	303 g/L [2.53 lb/US gal]	-	-
China	303 g/L [2.53 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. ^aEU Directive 2004/42/CE.

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

17630

Product components

Base 17639
Curing agent 97330

Standard shade / code

Light grey 12170 *

Gloss

Semi-flat

Volume solids

69 ± 2%

Hempadur 17630

Specific gravity

1.4 kg/L [11 lb/US gal]

Reference dry film thickness

150 micron [5.9 mils]

Micaceous iron oxide (MIO) shade / code

Grey 12430

Gloss

Semi-flat

Volume solids

67 ± 2%

Specific gravity

1.4 kg/L [12 lb/US gal]

Reference dry film thickness

150 micron [5.9 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).
- 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 (S) (ISO 8503-2).
- Surface profile Medium (G) (ISO 8503-2).

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

Application

Mixing ratio

Base 17639 : Curing agent 97330
(4 : 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]	30°C [86°F]
Pot life	3 hours	2 hours	1 hour

Application method

Tool	Thinning max vol.	Application parameters
Airless spray	5%	Nozzle pressure: 250 bar [3600 psi] Nozzle orifice: 0.021-0.025"
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].

Hempadur 17630

Film thickness

Specification range	Low	High	Recommended
Dry film thickness	125 micron [4.9 mils]	200 micron [7.9 mils]	150 micron [5.9 mils]
Wet film thickness	175 micron [7 mils]	290 micron [11 mils]	225 micron [9 mils]
Theoretical spreading rate	5.5 m ² /L [220 sq ft/US gal]	3.4 m ² /L [140 sq ft/US gal]	4.6 m ² /L [190 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 0°C [32°F] during application and curing.

Relative Humidity:

- Relative humidity must be below 85% during application.

Drying and overcoating

Product compatibility

- Previous coat: None or according to Hempel's specification.
- Subsequent coat: According to Hempel's Specification.
Recommended products are: Hempadur, Hemplathane

Drying time

Surface temperature		20°C [68°F]	10°C [50°F]	30°C [86°F]
Hard dry	hours	8	14	5

Determined for dry film thickness 150 micron [5.9 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 [50°F]	20°C [68°F]	30°C [86°F]
Atmospheric medium				
Hempadur 17630	Min	12 h	6 h	4½ h
	Max	Ext	Ext	Ext
Hemplathane HS 55610	Min	12 h	6 h	4½ h
	Max	20 d	10 d	7½ d
Immersion				
Hempadur 17630	Min	16 h	8 h	6 h
	Max	60 d	30 d	22 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 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	36 months	24 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.

Hempadur 17630

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.