

# Hempadur 4774D

## Product characteristics

### Description

Hempadur 4774D is a self-priming, high-build, pure epoxy paint providing both abrasion and corrosion resistance.

### Recommended use

Hempadur 4774D is recommended as a high-build primer, intermediate and/or self-primed finish for high performance, heavy-duty coating systems. Hempadur 4774D is fast curing and therefore suitable when high productivity is key - such as in the Wind segment.

### Service temperature:

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

### Certificates / Approvals

- Meets requirements to ISO 12944 when used as part of a predefined paint system. Part 6 C5.
- Meets requirements to NORSOK M-501 when used as part of a predefined paint system. Edition 6, System 1. Edition 7, System 1B.

### Features

- Heavy duty, abrasion resistant coating.
- Overcoatable by a wide range of epoxy- and polyurethane coatings.
- Low VOC.
- Applicable by standard heavy duty airless spray equipment in a wide range of film thicknesses.

## Product safety

**Flash point** 34°C [93°F]

### VOC content mixed product

Legislation	Value
EU	217 g/L [1.81 lb/US gal]
US (coatings)	217 g/L [1.81 lb/US gal]
US (regulatory)	217 g/L [1.81 lb/US gal]
China	217 g/L [1.81 lb/US gal]

According to specific legislation, see details in the Explanatory Notes available at Hempel website, [hempel.com](http://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

4774D

### Product components

Base 4774M

Curing Agent 9874D

### Standard shade\* / code

Light cream 20450 \*\*

### Gloss

Semi-gloss

### Volume solids

76 ± 2%

### Specific gravity

1.5 kg/L [12 lb/US gal]

### Reference dry film thickness

150 micron [6.0 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 2½ (ISO 8501-1) / SP 10 (SSPC).
- Remove dust, blast media and loose materials.
- All damage of shopprimer and contamination from storage and fabrication should be thoroughly mechanically/chemically cleaned prior to final painting.

### 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.
- 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 4774M : Curing Agent 9874D  
(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]
Pot life	60 min	45 min
Pot life (spray)	60 min	45 min
Pot life (brush)	60 min	45 min

### 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].

### Film thickness

Specification range	Low	High	Recommended
Dry film thickness	100 micron [4.0 mils]	250 micron [10 mils]	150 micron [6.0 mils]
Wet film thickness	131 micron [5.3 mils]	329 micron [13 mils]	197 micron [7.9 mils]
Theoretical spreading rate	7.6 m²/L [310 sq ft/US gal]	3 m²/L [122 sq ft/US gal]	5.1 m²/L [208 sq ft/US gal]

For best performance, avoid excessive film thickness. 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.

### Application conditions

- Temperature of product must be above 15°C [59°F] during 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.
- Surface temperature must be above 5°C [41°F] during application and curing.
- Surface temperature must be below 60°C [140°F] during application and curing.

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## Relative Humidity:

- Relative humidity must be below 85% during application.
- Relative humidity must be below 85% during curing.

## Application remarks

- Product requires heavy duty spray equipment; spray hoses shall be as short as possible.
- 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.  
Recommended products are: Hempadur, Hempathane

### Drying time

Surface temperature		10°C [50°F]	20°C [68°F]	30°C [86°F]	40°C [104°F]
Touch dry	min	30	15	15	15
Hard dry	hours	5	2½	2	1½
Fully cured	days	-	7	-	-

Determined for dry film thickness 150 micron [6.0 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 [50°F]	20°C [68°F]	30°C [86°F]	40°C [104°F]
Atmospheric medium					
Hempadur 4774D	Min	4 h	2 h	90 min	60 min
	Max	60 d	30 d	22 d	15 d
Hempathane HS 55610	Min	4 h	2 h	90 min	60 min
	Max	14 d	7 d	5½ d	3½ d
Atmospheric severe					
Hempadur 4774D	Min	4 h	2 h	90 min	60 min
	Max	60 d	30 d	22 d	15 d
Hempathane HS 55610	Min	4 h	2 h	90 min	60 min
	Max	14 d	7 d	5½ d	3½ 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.
- 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]
Base	36 months
Curing Agent	36 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)	7 g CO <sub>2</sub> e/m <sup>2</sup>	0.036 lb CO <sub>2</sub> e/ft <sup>2</sup>

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](http://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 <a href="http://www.hempel.com">www.hempel.com</a> and contain relevant information about the Product testing parameters
5.	Application Instruction	Where available, at <a href="http://www.hempel.com">www.hempel.com</a>
6.	Generic technical guidelines (e.g. on application and surface preparation)	Where available, at <a href="http://www.hempel.com">www.hempel.com</a>

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](http://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.