Hempel's Non-Skid 45710

Product characteristics

Description
Hempel's Non-Skid 45710 is a three component polyamide adduct cured epoxy high build coating. It forms a hard, tough, abrasion resistant non-skid coating resistant to abrasion and impact and to fresh and seawater, diesel oil, splashes from petrol, jet fuel, lubricating oil and related proucts. It contains a non-sparking aggregate and cures at temperatures down to -10°C. Formerly sold in UK under the code 457GB.

Recommended use
As a heavy duty non-skid coating on steel and concrete in severely corrosive environments and/or subject to mechanical wear. Suited for application onto weather decks, flight decks and helidecks on seagoing vessels and offshore installations.

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

Certificates / Approvals
- Tested and assessed according to UK Defence Standard 80-134, Anti-Slip coating system.

Product safety

Flash point 23°C [73°F]

VOC content mixed product

Legislation	Value
EU	289 g/L [2.41 lb/US gal]
US (coatings)	289 g/L [2.41 lb/US gal]
US (regulatory)	289 g/L [2.41 lb/US gal]
China	289 g/L [2.41 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
45710

Product components
Base 45719
Curing Agent 95570
Aggregate 97730

Standard shade / code
Dark grey 16400 *

Gloss
Semi-gloss

Volume solids
76 ± 2%

Specific gravity
2.1 kg/L [17 lb/US gal]

Reference dry film thickness
500 micron [20 mils]

* Colour stability may be affected by exposure to harsh chemical and/or high temperatures.

Hempel's Non-Skid 45710

Surface preparation

Cleanliness
- According to Hempel's Specification.

New build:
- According to Hempel's Specification.

Maintenance and Repair
- According to Hempel's Specification.

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

Application

Mixing ratio
Base 45719 : Curing Agent 95570 : Aggregate 97730
(4 : 1 : 1 by volume)

Products containing floating or settling particles/pigments need to be continuosly stirred during application. This is especially important in case of heavy thinning. It is recommended to use fixed volumes/can size for multi-component products. Stir well before use.

Thinner
Hempel's Thinner 08450

Cleaner
Hempel's Thinner 08450
Hempel's Tool Cleaner 99610

Pot life

Product temperature	20°C [68°F]
Pot life	2 hours

Application method

Tool	Application parameters
Hopper gun	Not Applicable.
Brush/Roller	Not Applicable.

If brush or roller application is used, more coats will be necessary to achieve the specified dry film thickness.

Film thickness

Specification range	Low	High	Recommended
Dry film thickness	400 micron [16 mils]	550 micron [22 mils]	500 micron [20 mils]
Wet film thickness	500 micron [20 mils]	700 micron [28 mils]	650 micron [26 mils]
Theoretical spreading rate	1.9 m²/L [77 sq ft/US gal]	1.4 m²/L [57 sq ft/US gal]	1.5 m²/L [61 sq ft/US gal]

The practical consumption factor may vary depending on application conditions, equipment and workmanship. Checking paint consumption per area can improve the control of 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. For best performance, avoid excessive film thickness.

Application conditions
- Surface temperature must be above -10°C [14°F] during application and curing.
- Temperature of product must be above 15°C [59°F] during application.
- Optimal paint temperature for proper mixing, pumping and spraying is: 18-22°C [64-72°F].
- Lower paint temperatures may require extra thinning, which will result in lower film build and slower drying.
- 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.

Hempel's Non-Skid 45710

Drying and overcoating

Product compatibility

- Previous coat: According to Hempel's Specification. Recommended products are: Hempadur 15570, Hempadur 15590
- Subsequent coat: None or according to Hempel's specification. Recommended products are: Hempel's Non-Skid 45710, Hempadur, Hemudur, Hempathane

Drying time

Surface temperature		20°C [68°F]
Touch dry	hours	4
Hard dry	hours	8
Fully cured	days	7

Determined for dry film thickness 500 micron [20 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]
Atmospheric medium				
Hempel's Non-Skid 45710	Min	27 h	12 h	6 h
	Max	Ext	Ext	Ext

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]
Base	24 months
Curing Agent	36 months
Aggregate	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)	28 g CO_2e/m^2	0.146 lb CO_2e/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.

Hempel's Non-Skid 45710

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.
- 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.