

Hempathane HS 55613

Product characteristics

Description

Hempathane HS 55613 is a two-component semi-gloss acrylic polyurethane topcoat, cured with aliphatic isocyanate, with good gloss and colour retention. Contains zincphosphate.

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

Recommended use

As a VOC-compliant, high-build finishing coat for protection of structural steel in corrosive environment.

May be specified as a one coat "Direct To Metal" system in environments classified as C2 and C3.

Service temperature:

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

Product safety

Flash point 31°C [88°F]

VOC content mixed product

Legislation	Value	5% thinning, by volume	Limit value, phase II (2010) ^a
EU	389 g/L [3.25 lb/US gal]	410 g/L [3.42 lb/US gal]	500 g/L [4.17 lb/US gal]
US (coatings)	389 g/L [3.25 lb/US gal]	-	-
US (regulatory)	389 g/L [3.25 lb/US gal]	-	-
China	389 g/L [3.25 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. Measured according to GB/T 23985-2009. ^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

55613

Product components

Base 55617
Curing Agent 95370

Standard shade* / code

Light grey 11150 **

Gloss

Semi-gloss

Volume solids

57 ± 2%

Specific gravity

1.4 kg/L [11 lb/US gal]

Reference dry film thickness

100 micron [3.9 mils]

Aluminium shade / code

Aluminium grey 19871 ***

Gloss

Please consult Hempel's Guideline on aluminium pigmented coatings.

* Wide range of colours is available via Hempel's Multi-Tint® system.

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

*** Appearance of the aluminium pigmented coats will depend on application method, drying conditions, handling etc. Please see the Guideline on Aluminium pigmented coatings at hempel.com or at your local Hempel website.

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Volume solids

53 ± 2%

Specific gravity

1.2 kg/L [10 lb/US gal]

Reference dry film thickness

100 micron [3.9 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 may be hand or power tool cleaned instead of abrasive blasting.
- Feather edges to sound surrounding coating.
- Remove dust, blast media and loose materials.

Roughness

- Surface profile Medium (S) (ISO 8503-2).

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

Application

Mixing ratio

Base 55617 : Curing Agent 95370
(7 : 1 by volume)

Stir well before use.

Thinner

Hempel's Thinner 08080

Cleaner

Hempel's Thinner 08080

Pot life

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

Application method

Tool	Thinning max vol.	Application parameters
Airless spray	5%	Nozzle pressure: 175 bar [2500 psi] Nozzle orifice: 0.017-0.021"

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	50 micron [2.0 mils]	125 micron [4.9 mils]	100 micron [3.9 mils]
Wet film thickness	90 micron [3.5 mils]	225 micron [9 mils]	175 micron [7 mils]
Theoretical spreading rate	11 m ² /L [450 sq ft/US gal]	4.6 m ² /L [190 sq ft/US gal]	5.7 m ² /L [230 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.

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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.
- Beware of ice on the surface at low temperatures.
- The film formation may be adversely affected by light rain, high humidity and/or condensation during application and the following interval after application: "8 hours, 20°C/68°F".

Relative Humidity:

- Relative humidity must be below 85% during curing.

Drying and overcoating

Product compatibility

- Previous coat: According to Hempel's Specification. Recommended products are: Hempadur Fast Dry 15560, Hempadur Mastic 45880/1
- Subsequent coat: None.

Drying time

Surface temperature		20°C [68°F]
Hard dry	hours	6
Fully cured	days	7

Determined for dry film thickness 100 micron [3.9 mils] at standard conditions, see Hempel's Explanatory Notes for details.

Drying conditions

- To obtain the drying time stated, it is important to maintain sufficient ventilation during application, drying and curing.
- Condensation on the freshly applied coating should be avoided.

Overcoating details

- The surface must be clean before overcoating.

Other remarks

- Hempel's Specification supersedes any recommendations given in the Product Data Sheets.

Storage

Shelf life

Ambient temperature	25°C [77°F]
Base	36 months
Curing Agent	24 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

- The curing agent is sensitive to moisture. Store in a dry place and keep the can tightly closed until use.

Carbon Footprint

Dry film thickness	1 µm	1 mil
GWP (Global Warming Potential)	8.5 g CO ₂ e/m ²	0.044 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.

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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.