

Hempafloor Mastic FC458

Product characteristics

Description

Hempafloor Mastic FC458 is a polyamide curing, high solids epoxy paint. It forms a hard and tough coating, and has good wetting properties. Complies with EU Directive 2004/42/EC, The Paints Directive on the limitation of volatile organic compounds:

Recommended use

Hempafloor Mastic FC458 is recommended to protect concrete floors and walls in residential and public areas exposed to light traffic such as malls, offices, hotels, restaurants, villas and small building garages. Ideal for light duty floors where protection to mild spillages, abrasion and other mild impacts are specified. And also recommended as a self-primed, surface tolerant paint system or as an intermediate or a topcoat in heavy duty paints systems, where low VOC and high film build are required. The product can be used where extended recoating properties for Polyurethane topcoats are requested. It may also be used directly on zinc silicate or spray metalized surfaces. This product can be used for minor repairs in immersed areas.

Features

- Versatile
- High surface tolerance
- Available in a wide range of colours
- Optimum economical protection

Product safety

Flash point 39°C [102°F]

VOC content mixed product

| Legislation | Value |
|-----------------|--------------------------|
| EU | 223 g/L [1.86 lb/US gal] |
| US (coatings) | 223 g/L [1.86 lb/US gal] |
| US (regulatory) | 223 g/L [1.86 lb/US gal] |
| Canada | 223 g/L [1.86 lb/US gal] |
| China | 223 g/L [1.86 lb/US gal] |
| Hong Kong | 223 g/L [1.86 lb/US gal] |
| Korea | 223 g/L [1.86 lb/US gal] |

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.

Product data

Product code

FC458

Product components

Base FB458
Curing Agent 95881

Standard shade* / code

Light grey 11150 **

Gloss

Semi-gloss

Volume solids

80 ± 2%

Specific gravity

1.5 kg/L [12 lb/US gal]

Reference dry film thickness

125 micron [4.9 mils]

* Epoxy coatings have an inherent tendency of chalking, fading and discolouring. This does not affect the performance of the coating

** For certain shades, extra coats may be required to obtain full opacity.

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Surface preparation

Cleanliness

- Remove dust, loose material and any other contamination.
- The surface must be dry and clean prior to application.
- Consult Hempel's separate Surface Preparation Guidelines for more details.

New build:

- Concrete: According to Hempel's Specification.
- Concrete must cure completely; for 28 days minimum.
- Concrete moisture content should be checked in accordance with ASTM D4263 or suitable alternative method.
- Moisture content in the surface must be below 4%.
- Remove dust, loose material and any other contamination.
- Consult Hempel's separate Surface Preparation Guidelines for more details.

Maintenance and Repair

- Remove dust, loose material and any other contamination.
- Moisture content in the surface must be below 4%.
- Surface imperfections in the substrate must be fixed/filled before paint application.
- Apply primer/sealer prior to application of filler.
- Consult Hempel's separate Surface Preparation Guidelines for more details.

Roughness

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

Application

Mixing ratio

Base FB458 : Curing Agent 95881
(3 : 1 by volume)

The full content of each of the component must be used in the mixing process. Before mixing the components, stir them individually to homogeneity. Stir the Base (Part A) and continue stirring whilst adding all the contents of the curing agent (Part B) and mix until homogenous. In general, thinning is not recommended. Do not open or mix the cans before the paint will be applied.

Thinner

Hempel's Thinner 08450

Cleaner

Hempel's Tool Cleaner 99610

Pot life

| Product temperature | 20°C [68°F] | 30°C [86°F] |
|---------------------|----------------|----------------|
| Pot life | 2 hours | 1½ hours |

Application method

| Tool | Application parameters |
|--------------------------|------------------------|
| Short hair/ Epoxy Roller | Not Applicable. |
| Brush | Not Applicable. |

Film thickness

| Specification range | Low | High | Recommended |
|----------------------------|------------------------------|------------------------------|--------------------------------|
| Dry film thickness | 100 micron [3.9 mils] | 200 micron [7.9 mils] | 125 micron [4.9 mils] |
| Wet film thickness | 125 micron [5 mils] | 250 micron [10 mils] | 150 micron [6 mils] |
| Theoretical spreading rate | 8 m²/L [330 sq ft/US gal] | 4 m²/L [160 sq ft/US gal] | 6.4 m²/L [260 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. 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.

Application conditions

- Temperature of product must be above 15°C [59°F] during application.
- Surface temperature must be above 15 °C [59°F] during application and curing.
- 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.
- Provide adequate ventilation during application and drying.
- For application and curing at other conditions, please contact your local Hempel representative.

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Relative Humidity:

- Relative humidity must be below 85% during drying and curing.

Drying and overcoating

Product compatibility

- Previous coat: None or according to Hempel's specification.
- Subsequent coat: Consult Hempel representative for information on approved topcoats.

Drying time

| Surface temperature | | 20°C [68°F] |
|---------------------|-------|----------------|
| Surface dry | hours | 4 |
| Through dry | hours | 24 |
| Dry to walk on | hours | 24 |
| Fully cured | days | 7 |

Determined for dry film thickness 200 micron [7.9 mils] at standard conditions, see Hempel's Explanatory Notes for details. Any masking tape used during paint application should be removed while the paint is still in the wet condition.

Overcoating

Hempel's specification supersedes any guidelines indicated in the overcoating table

| Quality name | | 20°C [68°F] |
|-------------------------|-----|----------------|
| Atmospheric medium | | |
| Hempafloor Mastic FC458 | Min | 24 h |
| | Max | 72 h |
| Hempathane HS 55610 | Min | 24 h |
| | Max | 48 h |

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.
- Condensation on the freshly applied coating should be avoided.

Overcoating details

- Please consult the specific Drying time and Overcoating details for this product.

Other remarks

- Epoxy coatings have an inherent tendency of chalking, fading and discolouring. This does not affect the performance of the coating

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) | 7.1 g CO ₂ e/m ² | 0.037 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.
- Application Instruction for this product.
- 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.