

Hempel's Uniprimer

Product characteristics

Description

Hempel's Uniprimer is a quick-drying primer with rust inhibiting pigments.

Recommended use

Hempel's Uniprimer is recommended as a versatile primer on steel and metal surfaces for Hempalin or Hempatex in mild to medium corrosive atmospheric environment, giving the opportunity to reduce the number of primers for maintenance.

Service temperature:

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

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.

Features

- One-component.
- Can be applied in low film thicknesses.
- Easy to apply with brush and roller.

Product safety

Flash point 30°C [86°F]

VOC content

| Legislation | Value |
|-----------------|--------------------------|
| EU | 519 g/L [4.33 lb/US gal] |
| US (coatings) | 519 g/L [4.33 lb/US gal] |
| US (regulatory) | 519 g/L [4.33 lb/US gal] |
| China | 519 g/L [4.33 lb/US gal] |

VOC values may vary with shade, please consult the Safety Data Sheet, section 9. According to specific legislation, see details in the Explanatory Notes available at Hempel website, hempel.com or at your local Hempel website.

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

13140

Standard shade* / code

Light grey 11320

Gloss

Flat

Volume solids

42 ± 2%

Specific gravity

1.3 kg/L [11 lb/US gal]

Reference dry film thickness

50 micron [2.0 mils]

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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).
- All damage of shopprimer and contamination from storage and fabrication should be thoroughly mechanically/chemically cleaned prior to final painting.
- Remove dust, blast media and loose materials.

Maintenance and Repair

- Spot abrasive blasting to min. PSa 2½ (ISO 8501-2) / SP 10 (SSPC).
- Minor areas may be hand or power tool cleaned instead of abrasive blasting.
- Remove dust, blast media and loose materials.

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

Application

Mixing ratio

This product contains heavy particles. Stir well before use.

Thinner

Hempel's Thinner 08080

Cleaner

Hempel's Thinner 08080

Application method

| Tool | Thinning max vol. | Application parameters |
|---------------|-------------------|---|
| Airless spray | 5% | Nozzle pressure: 150 bar [2200 psi] Nozzle orifice: 0.019-0.023" |
| Air spray | 10% | Not Applicable. |
| Brush | 10% | 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 | 25 micron [1.0 mils] | 100 micron [3.9 mils] | 50 micron [2.0 mils] |
| Wet film thickness | 60 micron [2.5 mils] | 230 micron [9 mils] | 120 micron [5 mils] |
| Theoretical spreading rate | 17 m ² /L [690 sq ft/US gal] | 4.2 m ² /L [170 sq ft/US gal] | 8.4 m ² /L [340 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.

Application remarks

- Stir well before use.

Drying and overcoating

Product compatibility

- Previous coat: None.
- Subsequent coat: According to Hempel's Specification.
Recommended products are: Hempalin, Hempatex.

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Drying time

| Surface temperature | | 10°C [50°F] | 20°C [68°F] | 30°C [86°F] | 40°C [104°F] |
|---------------------|-----|----------------|----------------|----------------|-----------------|
| Surface dry | min | 30 | 15 | 10 | 10 |
| Hard dry | min | 90 | 45 | 30 | 24 |

Determined for dry film thickness 50 micron [2.0 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 | | | | | |
| Hempalin Enamel 52140 | Min | 4 h | 2 h | 90 min | 60 min |
| | Max | 5½ d | 72 h | 54 h | 36 h |
| Hempatex Enamel 56360 | Min | 12 h | 6 h | 4½ h | 3 h |
| | Max | Ext* | Ext | Ext | Ext |
| Hempel's Uniprimer | Min | 12 h | 6 h | 4½ h | 3 h |
| | Max | Ext* | 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

- 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] |
|---------------------|----------------|----------------|
| Product | 60 months | 36 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.

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.

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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.