## MAIN PRODUCT-PROPERTIES

- **In accordance with TL/TP-KOR, Blatt 81 and is subject to regular external control**
- **High-grade, 2-pack Epoxy High-Solid Intermediate coat**
- **Nominal dry film thicknesses of 100 to 150 µm by spraying**
- **Direct coating of new hot-dip galvanised surfaces without sweeping with excellent adhesion is possible even under high atmospheric stress**

## PRODUCT DATA

### GEHOPON-E81-Protect

| | | |
|---|---|---|
| E81-9200 | Black | code number 681.11 |
| E81-8200 | Black red | code number 681.12 |
| E81-7532 | Pebble grey approx. RAL 7032 | code number 681.94 |
| E81-9502 | Grey white approx. RAL 9002 | code number 681.97 |

**Mixing ratio by weight**
9:1 with curing agent EX-40

Thinner V-568

### GEHOPON-E81-Protect / Guideline [1]

| Density (g/mL) | Solid content (weight %) | VOC-content (weight %) | Solid content by volume (%) | Solid content by volume (mL/kg) |
|---|---|---|---|---|
| **1.4** | **79.0** | **21.0** | **65.0** | **455** |

| DFT * (µm) | Calculated wet-film thickness (µm) | VOC-content (g/m²) [2] | Consumption (kg/m²) [3] | Spreading rate (m²/kg) |
|---|---|---|---|---|
| **100** | **154** | **4.5** | **0.220** | **4.5** |
| **120** | **185** | **4.5** | **0.265** | **3.8** |
| **150** | **230** | **4.5** | **0.330** | **3.0** |

1) Guideline averaged data, slight deviation are possible depending on the colour
2) Based on consumption in g/m² at DFT 10 µm
3) Theoretical consumption related on a smooth surface. Dependent on surface roughness and processing losses different consumption data will be achieved in practice

## COMMENTS ON PROCESSING

**Recommendation at temperatures of approx. 20 °C**

| | Airless | Airmix | Roller/Brush application [4] |
|---|---|---|---|
| **Nozzle diameter (mm)** | **0.38 to 0.74** | **0.38 to 0.48** | **-** |
| **Material pressure (bar)** | **200 to 300** | **150 to 250** | **-** |
| **Atomiser pressure (bar)** | **-** | **3.0 to 4.0** | **-** |
| **DFT * per working operation (µm)** | **100 to 150** | **100 to 150** | **60 to 80** |
| **Addition of thinner (%)** | **0 to 5** | **0 to 5** | **0 to 2** |

* DFT = Dry Film Thickness
4) recommended only for smaller areas, formation of a product-specific surface structure is possible

## COMMENTS ON PROCESSING

| | 10 °C | 20 °C | 30 °C |
|---|---|---|---|
| **Pot life at** | 6 hours | 4 hours | 3 hours |

| **Drying/Curing times at 150 µm DFT** | **Ambient air temperature** | | |
|---|---|---|---|
| | **7 °C** | **23 °C** | **30 °C** |
| dust-free: | after ≤ 8 hours | after ≤ 6 hours | after ≤ 2 hours |
| tack-free: | after 24 to 48 hours | after 12 to 16 hours | after 6 to 8 hours |
| dry to handle: | after ≤ 5 days | after ≤ 24 hours | after ≤ 16 hours |
| overcoating interval: | **7 °C** | **23 °C** | **30 °C** |
| | after approx. 24 hours | after approx. 16 hours | after approx. 12 hours |

The maximum waiting time until application of the top coat must not exceed 5 days, particularly in the case of natural weathering. Coated surfaces that should be recoated after waiting times> 5 days must be roughened by lightly oversweeping or grinding.

**Notes referring to Directive 2004/42/EC „Decopaint-Directive“**

| Subcategory as referred to in Annex IIA | VOC limit values (Phase II from 2010) | Max. VOC content of the product in its ready for use condition (including the max. amount of diluents as given in “Application methods” ) |
|---|---|---|
| J (“Two-pack reactive performance coatings”) Type SB | 500 g/l | < 500 g/l |

## INSTRUCTIONS FOR APPLICATION

### Surface preparation

#### Existing Priming coat or old coating

- Remove adhesion-reducing substances, e. g. cleaning, washing

#### Hot-dip galvanised steel surfaces

- New hot-dip galvanised surfaces can be coated directly with GEHOPON-E81-Protect. Assumptions are dry, clean surfaces without visible zinc reaction products (white rust, etc.)
- In the case of special loads for inaccessible areas and in the presence of visible zinc reaction products: Sweep blasting in accordance with EN ISO 12944-4.
  The surface must have a uniform dull appearance after surface preparation.

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**Air and surface temperature**
≥ 7 °C

relative humidity ≤ 80 %
dew point distance ≥ 3 °C

## PAINT SYSTEMS

## EXAMPLES

**Substrate: steel, blast-cleaning in surface preparation grade Sa 2 ½ in accordance with EN ISO 12944-4**

| | Product(s) (other paint systems on request) | NDFT (µm) |
|---|---|---|
| **Priming coats** | GEHOPON-E87-Zink<br>GEHOPON-E97R-Zink | 70 to 80 |
| **Intermediate coat** | GEHOPON-E81-Protect | 100 to 150 |
| **Top coats** | WIEREGEN-M87<br>GEHOTEX-W92 | 80 |

**Substrate: hot-dip galvanised steel in accordance with EN ISO 1461, sweep blast-cleaning in accordance with EN ISO 12944-4**

| | Product(s) (other paint systems on request) | NDFT (µm) |
|---|---|---|
| **Intermediate coat** | GEHOPON-E81-Protect | 80 to 150 |
| **Top coats** | WIEREGEN-M87<br>GEHOTEX-W92 | 80 |

## SAFETY MEASURES

The relevant data can be found in the current material safety data sheets, available at www.geholit-wiemer.de.