LACK– UND KUNSTSTOFF– CHEMIE GMBH

**TECHNICAL INFORMATION**

# GEHOLIT-K93-Metallgrund

**1C-AK/AY-HS Primer**
**TL/TP-KOR-Stahlbauten, Blatt 93**

## ■ FIELDS OF APPLICATION

High-grade, low-solvent protective Primer. It is suitable especially for rehabilitation and overhaul of old coatings based on one-pack coating materials.

## ■ PRODUCT PROPERTIES

GEHOLIT-K93-Metallgrund is produced using a specially modified synthetic resin combination, special active pigmentation.
Preferably, the material is applied by brush application or airless spraying. In one working operation it is possible to achieve a dry film thickness of 80 to 100 µm.
GEHOLIT-K93-Metallgrund is temperature resistant up to 120 °C

**Test certificates**

- The Primer has obtained admittance of the Bundesanstalt für Straßenwesen BASt (German Federal Highway Research Institute) in accordance with TL/TP-KOR-Stahlbauten Blatt 93 and are subject to regular external control.

## ■ PRODUCT DATA

**Product number and colours**
K93-102 sand yellow
K93-812 red brown

**Form of delivery**
brushable

**Shelf life**
At least 12 months in original cans at normal temperature

**Suitable thinner**
Thinner V-50

**Theoretical parameters**

GEHOLIT-K93-Metallgrund red brown, K93-812

| Density (g/mL) | Solid content (weight %) | VOC-content (weight %) | VOC-content per 10 µm DFT* (g/m²) | Solid content by volume (%) | Solid content by volume (mL/kg) |
|---|---|---|---|---|---|
| 1.55 | 80.5 | 19.5 | 4.8 | 62.5 | 405 |

| DFT (µm) | Calculated wet-film thickness (µm) | Consumption (kg/m²) | Spreading rate (m²/kg) |
|---|---|---|---|
| 80 | 128 | 0.200 | 5.0 |

Remarks

- All values are relevant for the mixture in case of two-pack materials
- DFT: Dry film thickness
- All values named are approximate values and relevant for the quality (colour). The values may differ slightly for other colours.

* baseline for calculation: consumption in g/m² at DFT 10 µm

**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” ) |
|---|---|---|
| i (“One-pack performance coatings”) Type SB | 500 g/l | < 500 g/l |

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**Coating systems**

| | | |
|---|---|---|
| **Substrate** | Steel | |
| **Surface preparation** | Automatic or manual derusting at least with preparation grade St 3 in accordance with EN ISO 12944-4 | |
| | **Product** | **NDFT (µm)** |
| **Primer coating** | GEHOLIT-K93-Metallgrund | 80 |
| **Intermediate coating** | GEHOLIT-K93-ZB | 80 to 120 |
| **Top coating** | GEHOLIT-K93 | 80 to 120 |

| | | |
|---|---|---|
| **Substrate** | hot-dip galvanising | |
| **Surface preparation** | Blast-Cleaning in accordance with EN ISO 12944-4 | |
| | **Product** | **NDFT (µm)** |
| **Intermediate coating** | GEHOLIT-K93-ZB | 80 to 120 |
| **Top coating** | GEHOLIT-K93 | 80 to 120 |

The coating system/s named are examples proven in practice which usually can be modified. The choice of coating materials as well as their number and film thickness depends on the stress to be expected, existing specifications and the methods of application.

Please take further notes from the “Planungshilfen” (planning helps) in the TL/TP-KOR Stahlbauten Annex G, Blatt 93.

## ■ INSTRUCTIONS FOR APPLICATION

**Surface preparation**

Steel surfaces:
Blast-cleaning in accordance with EN ISO 12944-4, surface preparation grade Sa 2 ½.

Automatic or manual derusting in accordance with EN ISO 12944-4, surface preparation P Ma respectively St 2 or St 3.

Old Coatings:
Adhesion-reducing substances must be removed.

Old coatings with good adhesion must be cleaned thoroughly. Poor adhering coatings must be removed, possibly spotted.

**Air and surface temperature**

Optimal results at temperatures of 15 to 25 °C, not below 5 °C.

**Relative humidity**

Max. 80 % relative humidity

The surface temperature of the parts to be coated must be at least 3 °C above the dew point of the surrounding air throughout the application. (see basic specification for corrosion protection EN ISO 12944-7)

## Comments on processing

**Application methods**

| Means of application / parameters | recommended nominal dry film thickness per working operation | Addition of thinner V-50 |
|---|---|---|
| Roller coating / brush application | 80 to 100 µm | up to 2 % |
| In case of roller coating / brush application several working operations can be necessary to obtain a uniform layer thickness and appearance. Among other things this depends on the colour, the processing procedures and equipment, the ambient conditions and the geometry of the parts to be coated. | | |
| Airless spraying<br>Nozzle diameter: 0.33 to 0.68 mm<br>Material pressure: 150 to 250 bar | 80 to 100 µm | up to 5 % |

Remarks

- The values above are related to a temperature of approximately 20 °C and are recommendations respectively rough guides. In practice it may be necessary to make modifications.

**Cleaning of equipment** With thinner V-50

**Drying times** At a DFT of 80 µm and a temperature of 20 °C

Dry to touch: after 2 to 3 hours
Tack free: after approx. 8 to 10 hours
Ready for over-coating: after several days

■ **SAFETY MEASURES**

The relevant data concerning safety measures can be found in the material safety data sheet of this product.
The valid issue of the material safety data sheet is available from our website www.geholit-wiemer.de.



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