

Two-pack epoxy resin top coating

■ **FIELDS OF APPLICATION**

Top coating for corrosion protection of steel structures.

GEHOPON-E8 is used where excellent mechanical resistance of the coatings as well as resistance to aggressive atmosphere, chemical influences and humidity are required, e.g. in chemical plants, metallurgical plants, sewage plants etc.

■ **PRODUCT PROPERTIES**

GEHOPON-E8 is a two-pack material based on epoxy resin. Together with suitable primer coatings both excellent mechanical resistance and outstanding corrosion protection of steel can be achieved.

Capacities

GEHOPON-E8 is resistant to natural weathering – even in aggressive environments – as well as to oils, greases and diluted acids and lyes. Temperature loads of up to 120 °C (dry heat) are possible.

Like all coating materials based on epoxy resin, coatings made of GEHOPON-E8 tend to heavy chalking under natural weathering conditions. A higher degree of resistance to UV-loads can be achieved by applying additional top coats of WIEREGEN-M87.

■ **PRODUCT DATA**

GEHOPON-E8

Curing agent

Product number	E8-S.... (depending on colour)	EX-35
Colours	RAL colours (other colours on request)	
Degree of gloss	Satin glossy	
Mixing ratio	4 parts by weight	1 part by weight
Form of delivery	Ready for brush application	
Shelf life	At least 12 months in original cans at normal temperature	
Suitable thinner	V-538	

Theoretical parameters

GEHOPON-E8, E8-S9010

Density (g/mL)	Solid content (weight %)	VOC-content		Solid content by volume	
		(weight %)	per 10 µm DFT* (g/m ²)	(%)	(mL/kg)
1.25	66.5	33.5	8.1	52	415
DFT (µm)	Calculated wet-film thickness (µm)	Consumption (kg/m ²)		Spreading rate (m ² /kg)	
80	151	0.192		5.2	

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")
J ("Two-pack reactive performance coatings") Type SB	500 g/l	< 500 g/l

Coating systems

Substrate	Steel	
Surface preparation	Blast-cleaning in preparation grade Sa 2 ½ in accordance with DIN EN ISO 12944-4	
	Product	NDFT (µm)
Primer coating	GEHOPON-E87-Zinc or GEHOPON-E24-Primer	80
Top coating	GEHOPON-E8	80

Suitable additional UV-resistant top-coating (optional):
WIEREGEN-M87

The coating system/s named are examples proved 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.

■ **INSTRUCTIONS
FOR APPLICATION**

Surface preparation Existing primer coatings must be intact as well as dry and clean.

Air and surface temperature Optimal results at temperatures of 15 to 25 °C, not below 10°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 DIN EN ISO 12944-7)

Comments on processing

Mixing Mix thoroughly with the enclosed quantity of curing agent, preferably with a mechanical mixer. Material must be stirred again after 15 minutes. Then the mixture is ready for use.

Application methods

Means of application / parameters	recommended nominal dry film thickness per working operation	Addition of thinner V-538
Airless spraying Nozzle diameter: 0.33 to 0.58 mm Material pressure: 150 to 250 bar	80 to 100 µm	40 to 50 µm: 5 to 9 % 80 µm: 0 to 5 %
High pressure/air spraying Nozzle diameter 1.5 to 2.0 mm Pressure approx. 3.5 to 4.5 bar	80 to 100 µm	40 to 50 µm: 6 to 10 % 80 µm: 4 to 7 %
Roller coating / brush application (depending on temperature)	40 to 60 µm	40 to 50 µm: up to 2 % 80 µm: no addition

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.

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-538

Pot life 6 to 8 hours (depending on temperature)

Drying and curing times Related to a temperature of 20 °C and a DFT of 80 µm

Dry to touch: After approx. 30 minutes

Tack free: After 5 to 6 hours

Ready for over-coating: After 12 to 16 hours

■ **SAFETY MEASURES**

The curing agent produces an alkaline reaction on skin and mucous membrane (eyes). Soiling must be avoided. In case of direct contact clean thoroughly with water and soap.

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.

The statements made here are based on the present state of our knowledge. We do not assume liability for damages resulting from the use of the material or from any advice given by our employees. In this respect, any advice given by our employees has to be seen as not binding. The processor is responsible for the supervision of construction, the maintaining of process guidelines and the observation of the established rules of techniques, even if our employees are present at the time our material is being applied.

This information is subject to modifications due to technical improvements. The latest edition of this information replaces all previous issues.