LACK– UND KUNSTSTOFF– CHEMIE GMBH

TECHNICAL INFORMATION

GEHOPON-E330-Metallgrund

2C-EP Primer
BASF-Specification: 3343 416

■ FIELDS OF APPLICATION

Protective primer coating for subsequent two-pack systems based on epoxy resin or polyurethane. To be used on bridges, on steel structures for tanks and devices, for plants and constructions exposed to aggressive atmosphere, for nuclear plants and similar objects.

■ PRODUCT PROPERTIES

GEHOPON-E330-Primer is based on epoxy resin and shows excellent adhesion to steel and hot-dip galvanised steel surfaces.
Other surfaces on request.
Due to its composition GEHOPON-E330-Primer is perfectly suitable as primer coating for subsequent two-pack systems.

Capacities

Together with suitable two-pack top coatings, corrosion protection systems can be achieved with excellent mechanical resistance, resistance against chemicals and aggressive atmosphere as well as light and weather resistance.

Temperature resistance (dry heat): 120 °C permanently
150 °C short term

■ PRODUCT DATA

	GEHOPON-E330-Primer	Curing agent
Product number and colour	E330-621 green	EX-4
Mixing ratio	8 parts by weight	1 part by weight

Form of delivery Ready for brush application after mixture with curing agent

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

Suitable thinner V-538 (also for cleaning of equipment)

Theoretical parameters

GEHOPON-E330-Primer, E330-621

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)
1.5	74	26	7	55	355
DFT (µm)	Calculated wet-film thickness (µm)	Consumption (kg/m²)		Spreading rate (m²/kg)	
80	147	0.226		4.4	

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

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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

Suitable Intermediate and Top coatings:

Substances according BASF-Specification:

GEHOPON-E330-ZB	BASF-No. 3343 556
GEHOPON-E330	BASF-No. 3343 580 to 585
WIEREGEN-M330	BASF-No. 3343 560 to 578

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

Steel surfaces:

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

Hot-dip galvanised steel surfaces:

Dry and clean surfaces are essential for good adhesion of coating materials. Besides contaminants like grease, oil, dust, etc. especially zinc salts (zinc corrosion products) have to be removed totally.
For hot-dip galvanised steel parts, which shall be exposed to natural weathering or condensation, a surface preparation by sweep-blasting (in accordance with DIN EN ISO 12944-4) is necessary. Sweep-blasted parts must show a mat surface.
Remark: Zinc salts are forming relatively quick and cannot - or hardly - be recognised at the beginning.

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	1 to 3 %
High pressure/air spraying Nozzle diameter 1.5 to 2.0 mm Pressure 3 to 4 bar	80 to 100 µm	4 to 6 %
Roller coating / brush application	40 to 60 µm	up to 1 %
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 at a temperature of 20 °C

Dry to touch: after approx. 30 min.
Tack free: after 3 to 4 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.