LACK– UND KUNSTSTOFF– CHEMIE GMBH

TECHNICAL INFORMATION

WIEMERDUR-E880R-Zink

2C-EP-Zinc rich Primer, quick curing

■ FIELDS OF APPLICATION

High-grade quick curing zinc-rich primer coating for corrosion protection of blast-cleaned steel surfaces, e.g. for hydraulics engineering constructions, steel girder construction, containers and similar objects.

■ PRODUCT PROPERTIES

WIEMERDUR-E880R-Zink is a highly pigmented zinc-rich primer based on epoxy resin.
On blast-cleaned steel surfaces the material provides excellent adhesion, temperature stability as well as outstanding corrosion protection capacities.

WIEMERDUR-E880R-Zink is suitable for a variety of topcoats. However, as with all zinc-rich primers, the top coatings have to be „compatible“ to zinc.

Interesting information about zinc dust primers can be found in „Merkblatt Nr. 4” published by the Bundesausschuss Farbe und Sachwertschutz, Frankfurt.

Capacities

After curing, WIEMERDUR-E880R-Zink is resistant to oils and greases, largely resistant to solvents as well as resistant to abrasion.

Temperature resistance (dry heat) up to: 160 °C permanent
200 °C short time

■ PRODUCT DATA

	WIEMERDUR-E880R-Zink	Curing agent
Product number and colour	E880R-390 reddish grey	EX-880R
Mixing ratio	16 parts by weight	1 part by weight

Form of delivery Ready for application after mixture with curing agent

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

Suitable thinner V-538

Theoretical parameters

WIEMERDUR-E880R-Zink, E880R-390

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)
2.5	85	15	6.7	56	224
DFT (µm)	Calculated wet-film thickness (µm)	Consumption (kg/m²)		Spreading rate (m²/kg)	
50	90	0.225		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

D-76676 Graben-Neudorf Sofienstraße 36 Tel. +49 7255 99-0 Fax +49 7255 99-123
D-47249 Duisburg Obere Kaiserswerther Straße 18 Tel. +49 203 99707-0 Fax +49 203 99707-10
D-01683 Nossen Gewerbestraße 8 Tel. +49 35242 6565-0 Fax +49 35242 6565-29

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 EN ISO 12944-4; roughness grade medium (G) in accordance to EN ISO 8503-1	
	Product	**NDFT* (µm)**
Primer coating	WIEMERDUR-E880R-Zink	50
Top coating	WIEMERDUR-E881	450

* Film thickness according to ISO 19840

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 EN ISO 12944-4, surface preparation grade Sa 2 ½. G-grade medium roughness in accordance with EN ISO 8503-1.

Air and surface temperature

Optimal results at temperatures of 5 to 25 °C, not below 0 °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

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: 0.38 to 0.63 mm Material pressure: 150 to 300 bar	50 µm	up to 1 %
High pressure/air spraying Nozzle diameter: 1.5 to 2.0 mm Pressure 4 to 5 bar	50 µm	1 to 2 %
Roller coating / brush application	50 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

Air temperature	+ 10 °C	+ 20 °C	+ 30 °C
Max. pot life	6 h	4 h	3 h

Over-coating interval

Air temperature	+ 3 °C	+ 10 °C	+ 20 °C	+ 30 °C
Waiting time	5 h	3 h	2 h	1 h

Drying and curing times
Drying stage in accordance with EN ISO 91175 at 80 µm DFT

Air temperature	+ 3 °C	+ 23 °C
Drying stage 1 (dry to touch)	≤ 2 h	≤ 1 h
Drying stage 6 (tack free)	≤ 5 h	≤ 2 h

■ 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.