

2C-PUR Intermediate, quick curing

■ **FIELDS OF APPLICATION**

Together with suitable primer and top coatings to be used in high-grade corrosion protection systems as intermediate coating with resistance to mechanical and chemical stresses.

Coating layers of WIEREGEN-M97R-ZB can be coated over even after many months or years without bonding problems, provided the surface is cleaned first.

Therefore WIEREGEN-M97R-ZB is an ideal alternative to intermediate coatings based on epoxy resin, when longer periods of natural weathering are expected.

■ **PRODUCT PROPERTIES**

WIEREGEN-M97R-ZB contains a polyacrylate binder with a aliphatic solvent polyisocyanate as curing agent.

Preferably, the material is applied by airless spraying, where a dry film thickness of 80 µm can be attained in a single working operation. Coatings can also be applied by brush or roller coating. In this case the dry film thickness will be approximately 60 to 80 µm.

Together with suitable primer and top coatings it is possible to achieve both good mechanical resistance and excellent corrosion protection.

Test Certificates

- The products are certified by the Bundesanstalt für Straßenwesen BAST (German Federal Highway Research Institute) in accordance with TL/TP-KOR-Stahlbauten Blatt 97 and are subject to regular external control (without code numbers - "Stoff-Nr.")

■ **PRODUCT DATA**

WIEREGEN-M97R-ZB

Curing agent

Product number and colour

M97R-7602 grey DB 702
M97R-5602 blue DB 502
M97R-6602 green DB 602

DX-10

Mixing ratio

20 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-89

Theoretical parameters

WIEREGEN-M97R-ZB, M97R-E7602

Density (g/mL)	Solid content (weight %)	VOC-content		Solid content by volume	
		(weight %)	per 10 µm DFT* (g/m ²)	(%)	(mL/kg)
1.6	75	25	7.4	54	340
DFT (µm)	Calculated wet-film thickness (µm)	Consumption (kg/m ²)		Spreading rate (m ² /kg)	
80	147	0.237		4.2	

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 EN ISO 12944-4	
	Product	NDFT (µm)
Primer coating	GEHOPON-E97R-Zink or GEHOPON-E97R-Metallgrund	80
Intermediate coating	GEHOPON-E97R-ZB or WIEREGEN-M97R-ZB in 1 to 2 working operations	80 to 160
Top coating	WIEREGEN-M97R	80

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

Coatings:

Adhesion-reducing substances must be removed.

**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 to 20 minutes. Then the mixture is ready for use.

Application methods

Means of application / parameters	attainable dry film thickness per working operation (approx.)	Addition of thinner V-89
Airless spraying Nozzle diameter: 0.33 to 0.58 mm Material pressure: 150 to 250 bar	80 µm	up to 5 %
High pressure/air spraying Nozzle diameter: 1.5 to 2.0 mm Pressure: 3 to 4 bar	80 µm	4 to 7 %
Roller coating / brush application	60 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.

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-562

Pot life

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

Waiting time between working operations

Air temperature	+ 3 °C	+ 10 °C	+ 20 °C	+ 30 °C
Waiting time	minimum	16 h	8 h	4 h
	maximum	unlimited	unlimited	unlimited

Drying and curing times

Drying stage in accordance with DIN 53150 at 80 µm DFT

Air temperature	+ 3 °C	+ 23 °C
Drying stage 1 (dry to touch)	≤ 4 h	≤ 1 h
Drying stage 6 (tack free)	≤ 12 h	≤ 4 h

■ 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.

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.