

TECHNICAL INFORMATION

Page 1/3 - March 2021 / Vers. 5 **Corrosion Protection**

WIEREGEN-DW18

2C-PUR Hydro Topcoat

MAIN PRODUCT-PROPERTIES

- High-grade, waterborne 2C-PUR topcoat for steel buildings and steel constructions
- Fulfill the technical requirements of Blatt 87 TL/TP-KOR-Stahlbauten in paint systems. Third party tested by IKS Dresden GmbH, report: PB300/199/11 and PB300/201/11
- Nominal dry film thickness of approx. 80 µm by spraying, of 40 to 60 µm by brush application or roller coating
- Temperature resistance (dry heat) up to 160 °C long term stress respectively 180 °C short term
- Depending on temperature and duration colour-changes may

PRODUCT DATA

WIEREGEN-DW18

MIO-colours RAL-colours, flat



DW18-E.... MIO-colours (according to G+W-colours) DW18-F....RAL-colours (other colours on request)



Mixing ratio by weight 9:1 with curing agent DZ-18



Demineralised water

WIERE	GEN-DW	18 Guidel	ine MIO-colou	ırs ¹⁾	
7 8 9 ÷ 4 5 6 ×	Density (g/mL) 1.4	Solid content (weight %) 65.0	VOC-content (weight %) 2.0	Solid conto (%) 51.0	ent by volume (mL/kg) 365
1 2 3 +	DFT * (µm) 80	Calculated wet-film thickness (μm) 157	VOC-content (g/m²) ²⁾ 0.5	Consumption (kg/m²) 3) 0.220	Spreading rate (m²/kg) 4.5

WIERE	GEN-DW	'18 Guidel	ine RAL-colou	urs ¹⁾	
7 8 9 ÷ 4 5 6 × 1 2 3 + 0 , =	Density (g/mL) 1.35	Solid content (weight %) 64.0	VOC-content (weight %) ≤ 2.0	Solid conte (%) 51.5	ent by volume (mL/kg) 380
	DFT * (μm)	Calculated wet-film thickness (μm)	VOC-content (g/m²) ²⁾	Consumption (kg/m²) 3) 0.210	Spreading rate (m²/kg) 4.8

¹⁾ Guideline averaged data, slight deviation are possible depending on the colour

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²⁾ Based on consumption in g/m² at DFT 10 μm 3) Theoretical consumption related on a smooth surface. Dependent on surface roughness and processing losses different consumption data will be achieved in practice



TECHNICAL INFORMATION

Page 2/3 - March 2021 / Vers. 5 Corrosion Protection

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COMMENTS ON PROCESSING

Recommendation at temperatures of approx. 20 °C







	Airless	High pressure	Roller/Brush application
Nozzle diameter (mm)	0.33 to 0.58	1.5 to 1.8	-
Material pressure (bar)	150 to 250	-	-
Atomiser pressure (bar)	-	4.0 to 5.0	-
DFT * per working operation (μm)	80	80	40 to 60
Addition of thinner (%)	0 to 3	0 to 3	0 to 3

^{*} DFT = Dry Film Thickness



Pot life at

2 hours (based on 20 °C)

Drying/Curing times at 80 μm DFT		Ambient air temperature 20 °C		
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	dust-free:	≤ 5 hours		
-	tack-free:	≤ 24 hours		
4	dry to handle:	≤ 72 hours		
	overcoating interval:	after approx. 24 hours		

Notes referring to Directive 2004/42/EC "Decopaint-Directive"					
Subcategory as referred	VOC limit values	Max. VOC content of the product			
to in Annex IIA	(Phase II from 2010)	in its ready for use condition (including the max. amount of diluents as given in "Application methods")			
J ("Two-pack reactive performance coatings") Type WB	140 g/l	< 140 g/l			

INSTRUCTIONS FOR APPLICATION

Surface preparation

Required priming coats respectively intermediate coats (see page 3)

Remove adhesion-reducing substances

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TECHNICAL INFORMATION

Page 3/3 - March 2021 / Vers. 5 Corrosion Protection

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Air and surface temperature 10 °C to 40 °C



relative humidity ≤ 80 % dew point distance ≥ 3 °C

Ensure sufficient air movement during drying

PAINT SYSTEMS EXAMPLES

Substrate: steel, blast-cleaning in surface preparation grade Sa 2 ½ in accordance with EN ISO 12944-4

		Product(s) (other paint systems on request)	NDFT (μm)
	Priming coats	GEHOPON-EW18-Metallgrund GEHOPON-E87-Zink GEHOPON-E90RI-Metallgrund	80 80 80 to 160
	Intermediate coats	GEHOPON-EW18-ZB or WIEREGEN-M87-ZB in 1 to 2 working operations	80 to 160
	Top coat	WIEREGEN-DW18	80

Substrate: hot-dip galvanised steel in accordance with EN ISO 1461, with appropriate surface preparation

		Product(s) (other paint systems on request)	NDFT (μm)
	Intermediate coats	GEHOPON-E5-Protect in 1 to 2 working operations GEHOPON-EW18-ZB GEHOTEX-W91	80 to 160 80 80 to 120
	Top coat	WIEREGEN-DW18	80

Several coating systems for the corrosivity categories C3 to C5 according to ISO 12944-5 are possible. Please ask for our advice for your special application.

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SAFETY MEASURES



The relevant data can be found in the current material safety data sheets, available at 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 or 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.