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-Stahl-bauten 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 occur**

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) flat
Mixing ratio by weight 9:1 with curing agent DZ-18	
Demineralised water	

WIEREGEN-DW18	**Guideline MIO-colours** [1]				
Density (g/mL)	Solid content (weight %)	VOC-content (weight %)	Solid content by volume (%)	Solid content by volume (mL/kg)	
1.4	**65.0**	**2.0**	**51.0**	**365**	
DFT * (µm)	Calculated wet-film thickness (µm)	VOC-content (g/m²) [2]	Consumption (kg/m²) [3]	Spreading rate (m²/kg)	
80	**157**	**0.5**	**0.220**	**4.5**	

WIEREGEN-DW18	**Guideline RAL-colours** [1]				
Density (g/mL)	Solid content (weight %)	VOC-content (weight %)	Solid content by volume (%)	Solid content by volume (mL/kg)	
1.35	**64.0**	**≤ 2.0**	**51.5**	**380**	
DFT * (µm)	Calculated wet-film thickness (µm)	VOC-content (g/m²) [2]	Consumption (kg/m²) [3]	Spreading rate (m²/kg)	
80	**155**	**0.5**	**0.210**	**4.8**	

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

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
dry to handle:	≤ 72 hours
overcoating interval:	after approx. 24 hours

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 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

	**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 EN ISO 12944-5 are possible. Please ask for our advice for your special application.

SAFETY MEASURES

The relevant data can be found in the current material safety data sheets, available at www.geholit-wiemer.de.