

# zandleven coatings

# **MONOPOX® PREMIUM**

epoxy

A two components high build epoxy primer/coating pigmented with non hygroscopic inert extenders with very good barrier properties.

- Can be applied in thick layers.
- After hardening excellent chemical and mechanical resistance.

**Application** as primer and/or coating on steel structures, Stainless Steel, Cor-ten steel,concrete in aggressive industrial and maritime environment C4/C5 according ISO 12944.

- Tested in accordance with ISO standard 16773, Electrochemical Impedance Spectroscopy
- When exposed direct to sunlight, coating will chalk.

### **Product information**

Finish Semi-gloss (25 GU, depending on colour)

Colour RAL-colours

Mass density approx. 1.3 kg/L (mixed product, depending on colour)

Solids content by volume approx. 62 volume % (mixed product, depending on colour)

/OC approx. 330 gr./L (volatile organic compound)

Recommended film thickness 70  $\,$  -120  $\mu m$  d.f.t. per layer

113-193 µm w.f.t. per layer (undiluted)

Theoretical spreading rate At  $\,$  70  $\mu$ m d.f.t. 8.9  $\,$ m²/L

At 120 μm d.f.t. 5.2 m<sup>2</sup>/L

Practical spreading rate Depending on several factors like shape of object, profile of surface,

method of application, application circumstances and experience.

A few guiding principles are:

Brush/roller 85-90% of the theoretical spreading rate Spraying 50-70% of the theoretical spreading rate

Flashpoint ISO 1523 Base 23 ℃

Hardener 2V4 30  $^{\circ}$ C Thinner FGM 631 26  $^{\circ}$ C Thinner WTD 107 14  $^{\circ}$ C

Dry temperature resistance 120 ℃

Durability At least 12 months, provided that it has been stored in closed

original packing at a dry and cool spot.

### **Drying times**

For d.f.t. up to 100 µm Dust dry Transportable Complete hardening Recoatable: Minimum interval Maximum interval \*

30 ℃	20℃	10℃	5℃	
½ hour	1½ hour	2 hours	3 hours	
8 hours	16 hours	24 hours	36 hours	
3 days	4 days	6 days	10 days	
4 hours 7 days	6 hours 14 days	8 hours 1 month	16 hours 3 months	

<sup>\*</sup> This period can be extended by cleaning and sanding the coating prior to application of the next layer.

Film thickness, ventilation, temperature and relative humidity are of great influence on the drying times.





**Application instructions** 

Mixing ratio Volume: Base - hardener 2V4 81:19

Weight: Base - hardener 2V4 86:14

Base and hardener should be mixed and applied at temperatures above 5 ℃. Mixing instructions

At lower temperatures extra thinner is needed, which gives a slighter resistance

against sagging and which will delay hardening. The components should be mixed homogeneously,

with a mechanical blender. Pay attention to the side and bottom of the can.

Induction time At 20 °C not necessary

At 10 °C at least 10 minutes

approx. 16 hours at 10℃ Pot life after mixing 20 litre packing:

approx. 8 hours at 20 °C approx. 5 hours at 30 °C

Optimal application circumstances

Temperature : 15-25 °C Humidity : 40-75%

Technical and esthetical properties can change when the product has been applied under different conditions.

**Usage information** 

Type of thinner Recommended thinner (depending on application and equipment)

Nozzle orifice

Nozzle pressure Typical d.f.t.

Cleaning of equipment

Airless-spray	Airspray	Brush/roller
FGM 631 / WTD 107	FGM 631 / WTD 107	FGM 631 / WTD 107
0 – 15 vol. %	5 – 20 vol. %	0 – 5 vol. %
0.41 – 0.46 mm	2.0 – 2.5 mm	
0.016 - 0.018 inch		
150 – 180 bar	3 – 5 bar	
150 μm	100 μm	80 μm
Thinner EGM 621 / W/TD	107	<u> </u>

#### **Surface conditions**

Steel

Blast according to ISO standard 8501-1:1988 Sa 21/2. Roughness profile Ra 10-12 μm Rz 50-60 μm. Surface should be clean and dry.

Repair and maintenance:

Clean the surface thoroughly with a suitable cleaning preparation

or by steam cleaning.

Remove salts and other water-soluble impurity by spraying with clean tap-water under high pressure.

Remove rust a.o. by (water)blasting Sa 2½ or derust mechanical until St. 2-3.

Apply the recommended paint system on a clean surface.

Mechanical or hand derusting gives less quality than (water)blasting and will result in less protection of the applied paint system.

Stainless Steel

Sweep blasting with a fine, non-metallic blasting medium until a uniform roughened surface has been obtained, or degrease followed by a chemical pre-treatment In accordance with the manufacturer's instructions



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## **Product Characteristics**

No coating work shall be carried out when the temperature of the surface is less than  $3^{\circ}$ C above dewpoint and when the substrate temperature is below  $5^{\circ}$ C.

Due to the presence of solvents, applying this product in confined spaces, adequate ventilation has to be ensured.

At low temperature and under humid conditions, amine blushing can occur, which can effect the intercoat adhesion negatively. Prior to the application of the next layer, the previous layer must be checked for this phenomena.

Discoloration or loss of gloss or other surface defects, can occur during drying and curing by condensation and or early water spotting. In particular bright and "full" colours.

This coating product is based on epoxy technology. It is recommendable that it should be overcoated with a durable finish.

Maximum film build in one coat is best attained by airless spray. Application by other techniques, it may be necessary to apply multiple coats in order to achieve the total specified dry film thickness.

### Safety description

See safety data sheet

#### Ventilation rules

Minimum required quantity of air to comply with:					
	MAC	10 % LEL			
Monopox Premium	1985 m³/L	73 m³/L			
Thinner FGM 631	3995 m³/L	160 m <sup>3</sup> /L			
Thinner WTD 107	4085 m³/L	168 m³/L			

MAC = Maximum Accepted Concentration

LEL = Lower Explosion Limit

Also consult the safety information sheets

### Pretreatment / Labelling / Technical Terms (downloadable from www.zandleven.com)

- A 1 Labeling of paint products in the European Community
- A 2 Physical data
- A 3 Persistency list for Monopox HB systems
- A 4 General guidelines for steelpreservation
- A 6 Pretreatment of construction steel









