



# zandleven coatings

## MONOPOX<sup>®</sup> METALCOAT ZL 80

epoxy

A two components high solid epoxyprimer/coating pigmented with zincphosphate and inert extenders.

- Applicable as a 1 layer coatingsystem, low industrial atmosphere, C1 and C2 according ISO 12944 or as primer/coating in a multiple layer system, medium industrial or marine atmosphere, C3 and C4 according ISO 12944.
- Good elasticity and mechanical resistance.
- Resistant against spilling and splashing of an extensive number of chemicals.
  
- Even after long lasting outdoor exposure can it be recoated with practically any coating system.
- When exposed direct to sunlight, coating will chalk.

### Product information

Finish	Semi-gloss (ca. 50 GU, depending on colour)
Colour	RAL colours and aluminium
Mass density	approx. 1.55 kg/L (mixed product, depending on colour)
Solids content by volume	ca. 80 volume % (mixed product, depending on colour)
VOC	approx. 175 gr./L (volatile organic compound)
Recommended film thickness	100-200 µm d.f.t. per layer 125-250 µm w.f.t. per layer (undiluted)
Theoretical spreading rate	At 100 µm d.f.t. 8.0 m <sup>2</sup> /L At 200 µm d.f.t. 4.0 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 35°C Hardener 2V41 29°C Thinner FGM 631 26°C Thinner WTD 107 14°C
Dry temperature resistance	120°C
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 175 µm  
Dust dry  
Transportable  
Complete hardening  
Recoatable:  
Minimum interval  
Maximum interval \*

30°C	20°C	10°C	5°C
1 hour	2 hours	3 hours	5 hours
8 hours	16 hours	24 hours	48 hours
3 days	5 days	8 days	14 days
5 hours	8 hours	16 hours	24 hours
5 days	10 days	21 days	30 days

\* 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 2V41	81:19
	Weight: Base – hardener 2V41	88:12
Mixing instructions	Base and hardener should be mixed and applied at temperatures above 10 °C. At lower temperatures extra thinner is needed, which gives a slighter resistance against sagging and which will delay hardening. The components should be blended 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	
Pot life after mixing	20 litre packing:	approx. 3 hours at 10 °C approx. 2 hours at 20 °C approx. 1 hour 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

	Airless-spray	Airspray	Brush/roller
Type of thinner	FGM 631 / WTD 107	FGM 631 / WTD 107	FGM 631 / WTD 107
Recommended thinner (depending on application and equipment)	0 – 15 vol. %	5 – 20 vol. %	0 – 5 vol. %
Nozzle orifice	0.38 – 0.53 mm 0.015 – 0.021 inch	2,0 – 2.5 mm	
Nozzle pressure	170 – 200 bar	3 – 4 bar	
Typical d.f.t.	100-175 µm	80-150 µm	75-125 µm
Cleaning of equipment	Thinner FGM 631 / WTD 107		

## Surface conditions

Steel

New steel:

Blast according to ISO standard 8501-1:1988 Sa 2½.

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 advised 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.



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### Product Characteristics

No coating work shall be carried out when the temperature of the surface is less than 3°C above dewpoint and when the substrate temperature is below 5°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 Metalcoat ZL 80	1150 m <sup>3</sup> /L	42 m <sup>3</sup> /L
Thinner FGM 631	3995 m <sup>3</sup> /L	160 m <sup>3</sup> /L
Thinner WTD 107	4085 m <sup>3</sup> /L	168 m <sup>3</sup> /L

MAC = Maximum Accepted Concentration

LEL = Lower Explosion Limit

Also consult the safety information sheets

### Pretreatment / Labeling / Technical Terms (downloadable from [www.zandleven.com](http://www.zandleven.com))

- A 1 Labeling of paint products in the European Community
- A 2 Physical data
- A 4 General guidelines for steelpreservation
- A 6 Pretreatment of construction steel



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