



zandleven coatings

MONOPOX® METALSEALER

epoxy

A two components epoxy sealer, pigmented with micaceous iron oxide and inert extenders.

- Excellent adhesion on fine blasted or chemical pre-treated hot-dip galvanised steel.
- Easy to apply in thick layers.
- After hardening excellent chemical and mechanical resistance.
- Can be used as primer/sealer on zinc rich primer like Monopox Micro-zink,
- Monopox LG micro-zink and Zinksilicaat ZL 400-55, also as primer on hot-dip galvanised steel and metal sprayed steel.
- Can even be recoated after long outdoor exposure with practically any paint system.

Product information

Finish	Mat
Colour	Green, red-brown, black and grey according to the micaceous iron oxide colouring card
Mass density	approx. 1.65 kg/L. (mixed product)
Solids content by volume	ca. 60 volume % (mixed product)
VOC	approx. 350 gr./L (volatile organic compound)
Recommended film thickness	50-100 µm d.f.t. per layer 85-165 µm w.f.t. per layer (undiluted)
Theoretical spreading rate	At 50 µm d.f.t. 12.0 m²/L At 80 µm d.f.t. 7.5 m²/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 26 °C Hardener 2V4 30 °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 contained 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 °C	20 °C	10 °C	5 °C
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	6 hours	16 hours	32 hours
7 days	14 days	1 month	3 months

*) 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	80:20
	Weight: Base – hardener 2V4	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 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	
Pot life after mixing	20 litre packing:	approx. 16 hours at 10 °C 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

	Airless-spray	Air spray	Brush/roller
Type of thinner	FGM 631 / WTD 107	FGM 631 / WTD 107	FGM 631 / WTD 107
Recommended thinner (depending on application and equipment)	5 – 15 vol. %	10 – 25 vol. %	0 – 5 vol. %
Nozzle orifice	0.46 – 0.53 mm 0.018 – 0.021 inch	2.0 – 2.5 mm	
Nozzle pressure	150 – 180 bar	3 – 5 bar	
Typical d.f.t.	125 µm	80 µm	60 µm
Cleaning of equipment	Thinner FGM 631 / WTD 107		

Surface conditions

Steel	Primer: Apply Monopox Metal sealer on with zinc dust paints primered surfaces, free from impurity and zinc salts.
Hot-dip galvanised steel	Blast with a fine, non-metallic blasting medium until a level roughened surface is obtained, or degrease the surface and then phosphatize or chromatzize (according to the rules of the manufacturer).



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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 phenomenon.

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 Metal sealer	1640 m ³ /L	74 m ³ /L
Thinner FGM 631	3995 m ³ /L	160 m ³ /L
Thinner WTD 107	4085 m ³ /L	168 m ³ /L

MAC = Maximum Acceptable Concentration

LEL = Lower Explosion Limit

Also consult the security information sheets

Pretreatment / Labeling / 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 steel preservation
- A 6 Pretreatment of construction steel

These data have been drawn up to the best of our knowledge and were correct at the date of issue. However we cannot accept full responsibility, because the choice of products and circumstances during elaboration of the systems fall outside our judgement. This documentation sheet will not automatically be replaced in case of modification. The English language text is a translation. In case of doubt the Dutch language original text has to be consulted as the authoritative text.

