zandleven coatings

MONOPOX® ZL 70 IJZERGLIMMER epoxy

A two components high solid epoxy coating pigmented with micaceous iron oxide (mio) and inert extenders.

- Resistant against water, polluted water, seawater, alkaline and weak acid solutions, mineral oil, aliphatic and aromatic solvents.
- Can be applied in thick layers.
- After hardening excellent chemical and mechanical resistance.

Application as intermediate and/or finish layer for coating systems on steel in industrial and naval environment.

- Can even be recoated after long outdoor exposure with two components and conventional paint systems.
- By outdoor application finish layer will chalk.

Product information

Finish	Semi-gloss metallic lustre
Colour	8 colours according to mio colour card
Mass density	approx. 1.5 kg/L (mixed product)
Solids content by volume	ca. 70 volume % (mixed product)
VOC	approx. 300 gr./L (volatile organic compound)
Recommended film thickness	80 -140 µm d.f.t. per layer 115-200 µm w.f.t. per layer (undiluted)
Theoretical spreading rate	At 80 µm d.f.t. 8.6 m²/L At 125 µm d.f.t. 5.5 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 23 °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 stored in closed original packing at a dry and cool spot.

Drying times

For d.f.t. up to 120 µm

	30 °C	20 °C	10 °C	5 °C
Dust dry	½ hour	1½ hour	2 hours	3 hours
Transportable	8 hours	16 hours	24 hours	36 hours
Complete hardening	3 days	4 days	6 days	10 days
Recoatable:				
Minimum interval	4 hours	6 hours	16 hours	32 hours
Maximum interval *	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	82.5:17.5
	Weight:	Base – hardener 2V4	89:11

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 15 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	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)	5 – 10 vol. %	5 – 15 vol. %	0 – 5 vol. %
Nozzle orifice	0.43 – 0.48 mm 0.017 – 0.019 inch	1.5 – 2.5 mm	
Nozzle pressure	150 – 180 bar	3 – 5 bar	
Typical d.f.t.	150 µm	100 µm	80 µm
Cleaning of equipment	Thinner FGM 631 / WTD 107		

Surface conditions

Steel

New steel:
Acraton HS-U, Monopox Metalcoat ZL 70, Monopox SF-HB, Monopox ZF-universal, Monopox micro-zink or Monopox LG micro-zink can be used as a primer.

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 de rust mechanical until St. 2-3.

Apply the advised paint system on a clean surface.

- Mechanical or hand de rusting 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 ZL 70 IJzerglimmer	1495 m³/L	57 m³/L
Thinner FGM 631	3995 m³/L	160 m³/L
Thinner WTD 107	4085 m³/L	168 m³/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