MONOPOX® SF-HB

epoxy

A two components high build epoxy primer with modified zinc phosphate.

- High-grade anti-corrosive, free from lead and chrome.
- Excellent adherence on sweep blasted or chemical pre-treated hot-dip galvanised steel.
- Easy to apply in thick layers at RH of 90%
- After hardening excellent mechanical resistance and elasticity.

Application as anti-rust primer/coating for coating systems on steel constructions in aggresive industrial environment and as primer on hot-dip galvanised steel.

- Even after long outdoor exposure recoatable with practically any paint system.
- Environment classification: C1 up to C5 in accordance with ISO 12944
- Excellent use as finish layer.
- When exposed direct to sunlight, coating will chalk.

Product information

Finish	Semi-gloss (approx.25 GU, depending on colour)
Colour	RAL colours
Mass density	approx. 1.45 kg/L (mixed product, depending on colour)
Solids content by volume	approx. 58 volume % (mixed product, depending on colour)
VOC	approx. 350 gr./L (volatile organic compound)
Recommended film thickness	70-120 µm d.f.t. per layer 120-210 µm w.f.t. per layer (undiluted)
Theoretical spreading rate	At 70 µm d.f.t. 8.3 m²/L At 120 µm d.f.t. 4.8 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.

Dryng 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	7 days	12 days	28 days
Recoatable:				
Minimum interval	4 hours	6 hours	8 hours	16 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	81:19
	Weight:	Base – hardener 2V4	87:13
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	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 – 15 vol. %	5 – 20 vol. %	0 – 5 vol. %
Nozzle orifice	0.33 – 0.48 mm 0.013 – 0.019 inch	2.0 – 2.5 mm	
Nozzle pressure	150 – 180 bar	3 – 5 bar	
Typical d.f.t.	80-120 µm	70-100 µm	60-80 µm
Cleaning of equipment	Thinner FGM 631 / WTD 107		

Surface conditions

Steel	New steel: Blasting according to the ISO standard 8501-1:2007 Sa 2½. Roughness profile Ra 10-12 µm Rz 50-60 µm. Surface must be clean and dry. Repair and maintenance: Clean the surface thoroughly with suitable cleaning preparation or by steam cleaning. Remove salts and other water-soluble impurity by spraying with clean tap-water under high pressure.
Hot-dip galvanised steel	Sweep blast with a fine, non-metallic blasting media, until a level roughened surface is obtained, or degrease the surface and after that phosphatize or chromatize (according to the instructions 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 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

Check safety data sheet

Ventilation rules

Minimum required quantity of air to comply with:		
	MAC	10 % LEL
Monopox SF-HB	2011 m³/L	76 m³/L
Thinner FGM 631	3995 m³/L	160 m³/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 / 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 steelpreservation
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 de 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.