ACRATON® HS Premium

epoxy

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

- Applicable in thick layers and at a high humidity up to 90%
- Good elasticity and mechanical resistance.
- Resistant against spilling and splashing of an extensive number of chemicals.

Application as primer and/or coating on steel constructions in aggressive industrial and maritime environment such as dike walls, lock doors and ship walls, C1 to C5-I/C5-M and Im1 to Im3 according ISO 12944. Tested in accordance with ISO standard 16773 , Electrochemical Impedance Spectroscopy.

- 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 (approx.50 GU, depending on colour)	
Colour	RAL colours and aluminium	
Mass density	approx. 1.40 kg/L (mixed product, depending on colour)	
Solids content by volume	approx. 80 volume % (mixed product, depending on colour)	
VOC	approx. 175 gr./L (volatile organic compound)	
Recommended film thickness	100-250 µm d.f.t. per layer	
	125-315 µm w.f.t. per layer (undiluted)	
Theoretical spreading rate	At 100 µm d.f.t. 8.0 m²/L	
	At 250 µm d.f.t. 3.2 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	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 200 µm	30°C	20°C	10°C	5°C
Dust dry	1 hour	2 hours	3 hours	5 hours
Transportable	8 hours	16 hours	24 hours	48 hours
Complete hardening	3 days	5 days	8 days	14 days
Recoatable:				
Minimum interval	5 hours	8 hours	16 hours	24 hours
Maximum interval*	5 days	10 days	21 days	45 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	78½:21½
	Weight:	Base – hardener 2V41	85:15

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. 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	0.48 – 0.53 mm 0.019 – 0.021 inch	2,0 – 2.5 mm	
Nozzle pressure	170 – 200 bar	3 – 4 bar	
Typical d.f.t.	125-250 µm	100-175 µm	75-125 µm
Cleaning of equipment	Thinner FGM 631		

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 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.

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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
Acraton HS Premium	1150 m³/L	42 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 5 General guidelines for the application of Acraton plastics
A 6 Pretreatment of construction steel