zandleven coatings

POLYFINISH® ASPARTIC HS 80-75 polyaspartic

A two component, low VOC, high solid polyaspartic gloss primer/finish coating.

- One layer system direct-to-metal up to C3 environment in accordance with ISO 12944
- Low-solvent content in accordance with EG regulations of 2007.
- Low temperature cure (5°C).
- Also to use in 2-layer system up to C4 (ISO 12944).

Application

One layer system applied direct to blasted steel, excellent UV and abrasion resistance.
For use as a single or two coat primer/finish coating system to protect construction and mining heavy machinery, agricultural equipment, railcars, transportation vehicles, pumps and other small machinery.

Product information

Finish	Gloss (75 GU, depending on colour)
Colour	RAL colours
Mass density	approx. 1.48 kg/L (mixed product, depending on colour)
Solids content by volume	approx. 80 volume % (mixed product, depending on colour)
VOC	approx. 197 gr./L (volatile organic compound)
Recommended film thickness	150 -200 µm d.f.t. per layer 190 -250 µm w.f.t. per layer (undiluted)
Theoretical spreading rate	At 150 µm d.f.t. 5.3 m²/L At 200 µm d.f.t. 4.0 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 29°C Hardener 2V6 38°C Thinner BB 55 27°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 150 µm

	30°C	20°C	10°C	5°C
Dust dry	1 hour	2 hours	3 hour	4 hours
Transportable	10 hours	16 hours	24 hours	24 hours
Complete hardening	1 day	2 days	4 days	7 days
Recoatable:				
Minimum interval	8 hours	12 hours	16 hours	24 hours
Maximum interval *	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 2V6	69 : 31
	Weight:	Base – hardener 2V6	78 : 22

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 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	BB 55	BB 55	BB 55
Recommended thinner (depending on application and equipment)	0 – 10 vol. %	5 – 15 vol. %	0 – 5 vol. %
Nozzle orifice	0.28 – 0.33 mm 0.013 – 0.017 inch	1.5 – 2.0 mm	
Nozzle pressure	130 – 200 bar	3 – 4 bar	
Typical d.f.t.	150-200 µm	80-120 µm	80 - 100 µm
Cleaning of equipment	Thinner BB 55		

Surface conditions

Steel

New steel:
Blast according to ISO standard 8501-1: 2007 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.

As primer and/of intermediate layer Acraton HS-U, Monopox Metalcoat ZL 70, Monopox SF-HB, Monopox ZF-Universal, Polyfinish MC-Zinc HS, Monopox Micro zink, Monopox Premium or Acraton HS Premium can be applied.

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Product Characteristics

No coating work shall be carried out when the temperature of the surface is less than 3℃ above dew point and when the substrate temperature is below 5℃.

Due to the presence of solvents, applying this product in confined spaces, adequate ventilation has to be ensured.

Condensation occurring during or immediately after application may result in a matt and an inferior film.

Colours/Colour stability:
Certain lead-free red and yellow colours may discolour when exposed to chlorine-containing atmosphere.
To obtain full opacity, an extra coat may be necessary, especially for certain lead-free colours in red,orange, yellow and green. Slight discolouration may occur at service temperatures above: 120℃.

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.

Higher film thickness, insufficient ventilation or cooler temperatures will require longer cure times and could result in solvent entrapment and premature failure.

A completely clean surface is mandatory to ensure intercoat adhesion, especially at long recoating intervals.
Any dirt, oil,and grease has to be removed, e.g. with suitable detergent. Salt to be removed by fresh water hosing.

Safety description
See safety data sheet

Ventilation rules

Minimum required quantity of air to comply with:		
	MAC	10 % LEL
Polyfinish Aspartic HS 80-75	785 m³/L	32 m³/L
Thinner BB 55	3937 m³/L	167 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 4 General guidelines for steelpreservation
A 6 Pretreatment of construction steel