



# zandleven coatings

## POLYFINISH® Hybride HS

polysiloxane

A two components high solid epoxy-silicone hybrid coating with the synergy of a high-quality epoxy and polyurethane.

- The product is free of isocyanates.
- Good weather resistance and colour lightfastness
- Slight dirt attachment and easy to rinse. Easily applicable in thick layers
- Low-solvent content in accordance with EG regulations of 2007.
- After curing excellent mechanical resistance and elasticity.

**Application** A long-lasting high-quality topcoat wide on (zinc-rich epoxy primer) pre-treated steel, (epoxy-sealer) pre-treated hot dip galvanised steel, environment C1 to C5 according ISO 12944.

### Product information

Finish	Glossy (85 GU, depending on colour)
Color	RAL colors
Mass density	approx. 1.5 kg/L (mixed product, depending on colour)
Solids content by volume	approx. 95 volume % (mixed product, depending on colour)
VOC	approx. 50 gr./L (volatile organic compound)
Recommended film thickness	100 -150 µm d.f.t. per layer 105 -160 µm w.f.t. per layer (undiluted)
Theoretical spreading rate	At 100 µm d.f.t. 9.5 m²/L At 150 µm d.f.t. 6.3 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 2V57 >90°C Spray thinner KK 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  
Dust dry  
Transportable  
Complete hardening  
Recoatable:  
Minimum interval  
Maximum interval\*

30°C	20°C	10°C
1½ hour	2½ hour	5 hour
10 hours	16 hours	24 hours
4 days	7 days	10 days
3 hours	6 hours	10 hours
10 days	14 days	1 month

\* This period can be extended by cleaning, using thinner KK55, 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 2V57 83:17 Weight: Base – hardener 2V57 89,5:10,5
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. 5 hours at 10°C approx. 3 hours at 20°C approx. 2 hours at 30°C It is recommended to always use fresh mixed product if the work is continued after a (longer) break.
Optimal application circumstances	Temperature : 15-25°C Humidity : 40-80%  A lower air humidity will slow down the curing, while a higher air humidity will promote the curing. Condensation that occurs during or immediately after application may result in a mat and inferior finish.

## Usage information

Type of thinner	Airless-spray	Airspray	Brush/roller
Recommended thinner (depending on application and equipment)	KK 55	KK 55	KK 55
Nozzle orifice	0 – 5 vol. %	0 – 5 vol. %	0 – 1 vol. %
Nozzle pressure	0.28 – 0.33 mm 0.011 – 0.017 inch	1.5 – 2.0 mm	
Maximum attainable d.f.t.	130 – 200 bar	3 – 4 bar	
Cleaning of tools	200 µm	150 µm	80 µm
	Thinner FGM 631		

## Surface conditions

Steel	<p>New steel: As primer Monopox Micro-zink, Monopox LG micro-zink, Monopox SF-HB, Monopox ZF-Universal, Monopox Premium or Monopox Metalsealer can be applied.</p> <p>Repair and maintenance: Clean the surface thoroughly with a suitable cleaning preparation or by steam cleaning.</p> <p>Remove salts and other water-soluble impurity by spraying with clean tap-water under high pressure.</p> <p>Remove rust a.o. by (water)blasting Sa 2½ or derust mechanical until St. 2-3.</p> <p>Apply the recommended paint system on a clean surface.</p> <ul style="list-style-type: none"><li>▪ Mechanical or hand derusting gives less quality than (water)blasting and will result in less protection of the applied paint system.</li></ul>
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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 dew point 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.

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

Colors/Color stability:

Certain lead-free red and yellow colors may discolor when exposed to chlorine-containing atmosphere.

To obtain full opacity, an extra coat may be necessary, especially for certain lead-free colors in red, orange, yellow and green. Slight discoloration may occur at service temperatures above: 120°C.

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.

Due to the moisture sensitivity of the product, there is a risk that the contents of a partially used container (in particular the hardener) will react with moisture from the atmosphere. This can negatively affect the quality of the final layer.

In case this product has to be recoated with the same product, within the maximum interval, the surface has to be cleaned with thinner KK 55, prior to application of the next layer.

### Safety description

Consult safety data sheet

### Ventilation precaution

Minimum required quantity of air to comply with:

	IOELV(EU)	10 % LEL
Polyfinish Hybride HS	26 m³/L	3 m³/L
Thinner KK 55	1214 m³/L	141 m³/L

IOELV = Indicative Occupational Exposure Limit Values

LEL = Lower Explosion Limit

Also consult the safety information sheets

### Additional and applicable information ( [www.zandleven.com](http://www.zandleven.com) )

- General guidelines
- Material Safety Data Sheet
- information curing agents en thinners
- Color surcharge
- General terms and conditions of delivery

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.



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