



# zandleven coatings

## POLYFINISH® MC-ST

Polyurethane

Polyfinish MC-ST is a one component moisture curing polyurethane aluminium coating.

- It has excellent adhesion to sound, tightly adherent rusty steel, and other marginal or poorly prepared surfaces. Due to its low viscosity, Polyfinish MC-ST has very good wetting properties.
- After curing, a good corrosion and abrasion resistant coating will be obtained.
- Polyfinish MC-ST is also a excellent barrier primer or tie coat to prevent lifting of strong solvent top coats over conventional coatings, and most chemical coatings.
- High heat resistance up to 200 °C.

### Product information

Finish	Semi Gloss
Colour	Aluminium.
Mass density	approx. 1.1 kg/L
Solids content by volume	approx. 51 volume %
VOC	425 gr./L
Recommended film thickness	50-75 µm d.f.t. per layer
Theoretical spreading rate	At 50 µm d.f.t. 10.0 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	Paint 27 °C Thinner BB 55 27 °C
Dry temperature resistance	200 °C
Durability	Approx. 6 months in unopened can. After opening the can, the coating should be used within two days, because moisture absorption can also continue in a closed can.

### Specific qualities

- Primer for all types of surfaces.
- Excellent barrier properties, quantified by standard TNO IV 34 Electrochemical Impedance Spectroscopy (EIS) test method with results  $R_c = 2 \cdot 10^8 \Omega/\text{cm}^2$  de  $Y_0 = 1,1 \cdot 10^{-11} \text{S}^n/\Omega$ , de  $n = 0,97$  and fraction of water absorbed over the first 24 uur  $\phi_t = 0,04$
- Fast recoatable, 1-2 hours.
- High heatresistant, up to 200 °C dry.
- Outstanding abrasion resistance.
- Excellent "wetting out" properties over sound, rusty steel.

### Drying times

By 50% R.H.	<b>20 °C</b>
Dust dry	1 - 2 hour dependent of R.H.
Transportable	6 hours
Complete hardening	24 hours
Recoatable:	
Minimum interval	2 hours dependent of R.H.
Maximum interval	24 hours dependent of R.H.

Film thickness, ventilation, temperature and relative humidity are of great influence on the drying times.



## Application instructions

Pot life after mixing	20 litre packaging:	approx. 3 hours at 10 °C approx 2 hours at 20 °C approx 1 hours at 30 °C
Application conditions	During application and curing the temperature should be above --5 °C. During application and hardening in closed and small spaces it is necessary to refresh the air continually to remove the solvent vapours, this because of curing, health and safety.	

## Usage information

Type of thinner	BB 55	BB 55	BB 55
Recommended thinner (depending on application and equipment)	vol. %	vol. %	vol. %
Nozzle orifice	0.33 – 0.43 mm 0.013 – 0.017 inch	1,0 – 2.0 mm	
Nozzle pressure	5 – 7 bar	1,2 – 2 bar	
Maximum attainable d.f.t.	75 µm	75 µm	50 µm
Cleaning of tools	Thinner BB 55		

## Surface conditions

Steel	<p>Repair and maintenance:</p> <p>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 2 or derust mechanical until St. 2-3. Apply the recommended paint system on a clean surface.</p>
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## Product Characteristics

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.

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
Polyfinish MC-ST	1695 m³/L	70 m³/L
Thinner BB 55	3935 m³/L	165 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](http://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

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