PU 500-20 2K PU Mica Topcoat matt

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Intended use

2K polyurethane micaceous iron coating according to TL 918 300, sheet 87, can be used as topcoat within the anticorrosion coating system for steel, zinced substrates and aluminium. Designed as top coating for bridges, railings, docks, piping and structures in aggressive atmosphere as well as for areas exposed to sewage and seawater. Durable corrosion protection and decorative effect.

Processing instructions



Mixing ratio hardener PU 912-XX

by weight (lacquer : hardener) by volume (lacquer : hardener)

5:1

3:1



Hardener

Mipa PU 912-10, PU 912-25, PU 912-40



Pot life

with hardener -10 approx. 1.5 h at 20 °C with hardener -40 approx. 8 h at 20 °C



Thinner

Mipa 2K-Verdünnung V 10, V 25, V 40



Processing viscosity gravity spray gun

20 - 30 s 4 mm DIN

Airmix/Airless

30 - 40 s 4 mm DIN



P	Applic	ation	mode

application mode	hardener	pressure (bar)	nozzle (mm)	spray passes	dilution
gravity spray gun/ HVLP	-	2,0 - 2,5	1,8 - 2,0	2	20 - 25 %
Airmix / Airless compound pressure	-	1,0 - 2,0 100 - 120	0,33 - 0,53	1	10 - 15 %
paint brush, roller					5 - 10 %



Drving time

hardener	object temperature	dust dry	set to touch	ready for assembly	sandable	recoatable
-	20 °C	25 - 30 min	50 - 60 min	10 - 12 h	-	
_	60 °C		-	30 min		

Fully cured after 5 - 6 days (at 20 °C).

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Note .

Characteristics: binder base: polyurethane acrylic system

solids content (% by weight): ~ 80
solids content (% by volume): ~ 55
delivery viscosity DIN 53211 4 mm (in s): thixotropic density DIN EN ISO 2811 (kg/l): ~ 1,9
gloss level ISO 2813 at 60° (GU): matt*

Properties: Highest corrosion protection, abrasion-resistant, viscoelastic

Highly UV- and weather-resistant

Excellent resistance to chemical and mechanical strains

Heat resistance:

Short-term heat exposure: 180 °C
 Permanent heat exposure: 150 °C

Theoretical spreading rate: $\sim 23.8 \text{ m}^2/\text{kg}$, 5:1 by weight with PU 912-25, for 10 μ m dry film thickness.

 \sim 40,2 m²/l, 5:1 by weight with PU 912-25, for 10 μ m dry film thickness.

Storage: For at least 3 years in the unopened original container. Optimum storage conditions

between + 5 °C and + 25 °C, avoid direct sunlight. Other storage conditions may lead

to undesirable properties of the material.

VOC: < 500 g/l.**

Processing conditions: From + 10 °C and up to 80 % relative humidity. Ensure adequate air ventilation.

Substrate preparation: Remove oil, grease, rust, mill scale, rolling skins, as well as other substances

impairing the function of the coating!

Attention: A direct adhesion cannot be taken as granted due to most different kinds of metals, alloys, metallic and conversion coatings and so on. The adhesion must therefore be tested on the original metal substrate.

Steel:

- Blast to cleaning degree Sa 21/2, remove blast residues and overcoat promptly.
- De-rust with hand and power tools to degree of cleanliness St 3.
- Degrease with Mipa WBS Reiniger or Mipa Silikonentferner.

Zinced substrates:

- Clean the surface with the ammonia solution Mipa Zinkreiniger.
- Sweep blast.

Aluminium:

- Degrease with Mipa 2K-Verdünnung, sand thoroughly with sandpaper P 360/400 and clean subsequently with Mipa Silikonentferner.

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Proposed coating structure: 2-coat system

Steel, zinced substrates, aluminium:

Priming coat: ***EP 100-20 with 50 - 70 µm dry film thickness or with 25 - 30 µm dry

film thickness on aluminium.

Finishing coat: PU 500-20 with 50 - 60 µm dry film thickness.

3-coat system

Steel, zinced substrates:

Priming coat: ***EP 100-20 with 50 - 70 μm dry film thickness.

Intermediate coat: EP 500-20 with 60 - 80 µm dry film thickness (maximum corrosion

protection with 140 - 160 µm DFT).

Finishing coat: PU 500-20 with 50 - 60 µm dry film thickness.

In case of permanent exposure to water

Steel:

Priming coat: ***2K-Zinkstaubfarbe with 60 - 80 µm dry film thickness.

Intermediate coat: EP 500-20 with 60 - 80 µm dry film thickness (maximum corrosion

protection with 140 - 160 µm DFT).

Finishing coat: PU 500-20 with 50 - 60 µm dry film thickness.

Special notes:

- *Due to the special surface, a measurement according to DIN EN ISO 2813 is inappropriate!
- **This product has the following maximum VOC-values:
- Applied by brush/roller with hardener PU 912-XX: < 500 g/l of VOC.
- Applied by spraying with hardner PU 912-XX: < 550 g/l.
- ***Further Mipa primers are available. Please contact your technical adviser or our application technicians.

For professional use only.

The details of the paragraphs - Proposed coating structure, Characteristics, Theoretical spreading rate, VOC - refer to the colour shade DB 701. For other colour shades, these may deviate.

In order to achieve optimum iron mica effects and to avoid strips, it is advisable to spray the finishing coat or to roll or paint in only one direction.

Check colour shade prior to application.

In case of application by means of an Airmix/Airless device, it is recommended testing beforehand the equipment for its suitability. If micro foam or bubbling emerge during the application with an Airmix/Airless device, it is recommended adding more thinner or using the additives 2K-Systemzusatz PUA and PUS. Furthermore, the film thickness should be kept as low as possible.

If required we also offer hardeners and cleaning agents that are suitable for 2-component mixing and dosing units. Please contact your technical adviser or our application technicians.

Cleaning of tools:

Clean tools immediately after use with Mipa Nitroverdünnung.