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Intended use

2K polyurethane acrylic paint with long open time for the top quality coating of facades, machines and constructions. Suitable for brush and roller applications.

This product complies in combination with EP 100-20 with the requirements for fire behaviour of materials and components according to EN 45545-2:2013 + A1:2015.

Processing instructions



Mixing ratio		
hardener	by weight (lacquer : hardener)	by volume (lacquer : hardener)
PU 900-25, PU 912-XX, PU 933-XX, H, MS	4:1	3:1
PU 914-XX	6:1	5 : 1
PU 916-XX	7:1	6:1
A 60	10:1	8:1



Hardener

Mipa PU 900-25, PU 912-10, PU 912-25, PU 912-40, PU 933-05, PU 933-10, H 10, H 25, MS 25, MS 40 Mipa PU 914-10, PU 914-25, PU 914-40

Mipa PU 916-10, PU 916-25 Mipa PUR Plus-Härter A 60



Pot life

with hardener -10 approx. 1,5 h at 20 °C with hardener A 60 approx. 8 h at 20 °C



Thinner

Mipa 2K-Verdünnung



Spray viscosity gravity spray gun

20 - 25 s 4 mm DIN

Airmix/Airless

25 - 35 s 4 mm DIN



Application mode					
application mode	hardener	pressure (bar)	nozzle (mm)	spray passes	dilution
gravity spray gun/ HVLP	PU 900 / 912 / 933 / H / MS	2,0 - 2,5	1,2 - 1,3	2 - 4	15 - 20 %
gravity spray gun/ HVLP	PU 914 / 916	2,0 - 2,5	1,5 - 2,0	1 - 3	0 - 5 %
Airmix / Airless	PU 900 / 912 / 933 / H / MS	100 - 120	0,23 - 0,28	1	0 - 10 %
Airmix / Airless	PU 914 / 916	100 - 120	0,23 - 0,28	1	0 - 5 %
brush, roller*	A 60		-	-	0 - 5 %

^{*}suitable : e.g. mohair, nap, velour, Glattfilt, Rolloplan, foam paint roller; unsuitable: --

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recoatable

	Drying time hardener	object temperature	dust dry	set to	ready for assembly	sandable
	-10	20 °C	15 - 30 min	2 - 3 h	12 h	
	-10	60 °C		20 min	30 - 40 min	
	-25	20 °C	30 - 45 min	3 - 4 h	16 h	
	-25	60 °C		30 min	45 min	

1,5 - 2 h

1,5 - 2 h

30 - 45 min

Fully cured after 7 - 8 days (20 °C).

-40 / A 60

-40 / A 60

PU 933-05

PU 933-10

ivote

Characteristics: binder base: polyurethane-acrylic system

solids content (% by weight): 62 - 67 solids content (% by volume): 49 - 51 delivery viscosity DIN 53211 4 mm (in s): thixotropic density DIN EN ISO 2811 (kg/l): 1,2 - 1,3 gloss level ISO 2813 at 60° (GU): > 80 gloss

8 - 10 h

2 - 3 h

30 - 45 min 12 h

24 h

1 h

12 h

Properties: ong open time, high-build coating

20 °C

60 °C

20 °C

20 °C

electrostatic application possible

highly resistant to water

highly UV- and weather-resistant

heat resistance:

short-term heat exposure: 180°C
permanent heat exposure: 150°C
adhesion on steel and zinced substrates

adhesion on aluminium: Gt 1

Theoretical spreading rate: 41,5 - 45,9 m²/kg, 10:1 by weight with A 60, for 10 µm dry film thickness

52,4 - 53,7 m²/l, 10:1 by weight with A 60, for 10 μ m dry film thickness 35,9 - 40,3 m²/kg, 4:1 by weight with PU 900-25, for 10 μ m dry film thickness 44,3 - 45,6 m²/l, 4:1 by weight with PU 900-25, 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 Regulation: EU limit value according to Directive 2004/42/EC for this product (category A/j): 500

g/l.

This product contains the following maximum VOC-values:

applied by brush/ roller with hardener Härter A 60: < 400 g/l of VOC

applied by spraying with hardener PU 914-XX, PU 916-XX: < 420 g/l of VOC

applied by spraying with hardener PU 900-25, PU 912-XX, PU 933-XX, H, MS: < 500

g/I of VOC

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

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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

powder-coated and coil-coated facade elements:

- preclean with Mipa WBS Reiniger, wash with water and clean again with Mipa Silikonentferner and in case of chalking old paintworks apply Mipa Tiefgrund LH to consolidate the substrate.

Proposed coating structure: single coat system

steel, zinced substrates, aluminium:

PU 250-90 with 60 - 70 µm dry film thickness

2-coat system

steel, zinced substrates:

priming coat: *EP 100-20 with 50 - 70 µm dry film thickness finishing coat: PU 250-90 with 50 - 60 µm dry film thickness

aluminium:

priming coat: *EP 100-20 with 25 - 30 µm dry film thickness finishing coat: PU 250-90 with 50 - 60 µm dry film thickness

powder-coated or coil-coated facade elements:

primer for spot repair: *EP 100-20 with 50 - 70 µm dry film thickness

finishing coat: PU 250-90 with 60 - 80 μm dry film thickness

*Further Mipa primers are available. Please contact your technical adviser or our application technicians.

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Special notes:

For professional use only.

Especially UV-resistant pigmentations (e.g. pastel shades for facades) are available on demand.

Furthermore it's possible to mix it with neon colours which can be applied then as single-layer. Please see the technical data sheet "Mipa Neon-Farbtöne PMI single-layer paints"

Check colour before use.

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 blistering 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.

To optimise the flow properties and to reduce blistering when applying by roller, we recommend adding 5% of Mipa 2K-Systemzusatz PUS before the crosslinking.

Mipa PU 250-90 can also be applied on mineral substrates. Please observe technical data sheet Mipa PU 250-70 Fußbodenbeschichtung to get more information about application and properties.

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.

Depending on the hardener in use and on the processing condition, the gloss level may prove to be higher or lower. The mentioned data refer to the hardener of series: PU 900-25, PU 912-XX, PU 933-XX.

Cleaning of tools:

Clean tools immediately after use with Mipa Nitroverdünnung.