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Intended use

High-quality 2K polyurethane acrylic paint to coat commercial vehicles, façade elements as well as machines and constructions exposed to high strain.

In combination with Mipa EP 100-20 it can be used harmlessly to coat surfaces that are in direct contact with both dry and abrasive food (e.g. grain). (ISEGA certificate: 43517 U 16).

Applied on the chipboards, Mipa PU 240-90 is classified B1 according to the test to determine the fire behaviour as per DIN 4102-1.

Processing instructions



Mixing ratio by weight (lacquer : hardener) by volume (lacquer : hardener) PU 900-25, PU 912-XX, PU 933-10, PU 950-25 3 : 1 2 : 1 PU 914-XX 4 : 1 3 : 1 PU 916-XX, A 60 5 : 1 4 : 1



Hardener

Mipa PU 900-25, PU 912-10, PU 912-25, PU 912-40, PU 933-10, PU 950-25

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 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 - 25 s

Airmix/Airless

20 - 25 s



Application mode application mode	hardener	pressure (bar)	nozzle (mm)	spray passes	dilution
gravity spray gun/ HVLP	_	2,0 - 2,5	1,2 - 1,3	2 - 4	10 - 15 %
Airmix / Airless compound pressure	-	1,0 - 2,0 100 - 120	0,23 - 0,28	1	10 - 15 %
paint brush, roller*	A 60			-	0 - 5 %

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VOC:

Processing conditions:





Drying time hardener	object temperature	dust dry	set to	ready for assembly	sandable	recoatable
 	20 °C	25 - 30 min	2 - 3 h	6 - 8 h		-
	60 °C		_	30 min	-	

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

Note					
Characteristics:	binder base: solids content (% by weight): solids content (% by volume): delivery viscosity DIN 53211 4 mm (in s): density DIN EN ISO 2811 (kg/l): gloss level ISO 2813 at 60° (GU):	polyurethane-acrylic system ~ 61 ~ 45 140 - 160 ~ 1,3 > 80 gloss			
Properties:	Electrostatic application is possible Highly water-resistant Highly UV- and weather-resistant High chemical resistance Highly resistant to solvents Scratch resistant Excellent chemical and mechanical resistance Heat resistance: - Short-term heat exposure: 180 °C - Permanent heat exposure: 150 °C				
Theoretical spreading rate:	$\sim 46,4$ m²/kg, 5:1 by weight with A 60, for 10 µm dry film thickness. $\sim 52,4$ m²/l, 5:1 by weight with A 60, for 10 µm dry film thickness. $\sim 37,9$ m²/kg, 3:1 by weight with PU 912-25, for 10 µm dry film thickness. $\sim 39,5$ m²/l, 3:1 by weight with PU 912-25, for 10 µm dry film thickness.				
Storage:	For at least 3 years in the unopened original container. Optimum storage conditions between $+5^{\circ}\text{C}$ and $+25^{\circ}\text{C}$, avoid direct sunlight. Other storage conditions may lead to undesirable properties of the material.				

From + 10 $^{\circ}$ C and up to 80 $^{\circ}$ C relative humidity. Ensure adequate air ventilation.

< 450 g/l.**

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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, glass surface finish and conversion coatings and so on. The adhesion must therefore be tested on the original 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.

Glass:

- 1. Before coating, it is indispensable to determine definitely the recoatable glass surface (e.g. by means of an appropriate measure device to determine the tin side of float glass) because it is generally impossible to coat the side which came in contact with the tin bath.
- 2. Degrease with Mipa WBS Reiniger or Mipa Silikonentferner.

Proposed coating structure: Steel, zinced substrates:

Priming coat: ***EP 100-20 with 50 - 70 µm dry film thickness. Finishing coat: PU 240-90 with 50 - 60 µm dry film thickness.

Aluminium:

Priming coat: ***EP 100-20 with 25 - 30 µm dry film thickness. Finishing coat: PU 240-90 with 50 - 60 µm dry film thickness.

2-coat system

Glass:

Pretreatment: Mipa 1K-Glasprimer.

Finishing coat: PU 240-90, incl. PU 950-25, with 50 - 60 µm dry film thickness.

Single coat system

Glass:

Finishing coat: PU 240-10, incl. PU 950-25, with 50 - 60 μm dry film thickness.

Note: In areas with increased mechanical and/or moisture exposure a

pretreatment with Mipa 1K-Glasprimer is prescribed.

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Special notes:

- *Suitable: e.g. mohair, Supren, velour, Glattfilt, Rolloschaum. We recommend MP Heizkörperwalze Aurora and MP Farbwalze UniPlan.
- **This product has the following maximum VOC-values:
- Applied by brush/ roller with hardener A 60: < 460 g/l of VOC.
- Applied by spraying with hardener PU 912-XX: < 550 g/l of VOC.
- ***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 RAL 7035. For other colour shades, these may deviate.

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".

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.

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.

To optimise the flow properties and to reduce blistering when applying by roller, we recommend the addition of 5 % of Mipa 2K-Systemzusatz PUS. Mipa 2K-Systemzusatz PUS must be stirred well in the paint otherwise cratering may result. For roller application, please consider generally the following hints:

- Before use, roll a new roller over the sticky side of a tape to remove fluff, hairs and so on
- Soak new roller completely with paint before starting the application and roll out to the air out of the roller.
- Do not apply at direct sunlight or on heated substrates. Object and processing temperature should be between + 10 $^{\circ}$ C and max. + 25 $^{\circ}$ C.
- Apply only under dry weather conditions: no rain, dew or fog
- Move roller uniformly and not too fast, get rid of stubborn bubbles by slow rolling with low contact pressure.
- Avoid to apply too thick layers in one pass
- Due to the system, this product is not suitable for application on large surfaces.

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 933-10, PU 950-25.

For military use please observe the technical data sheet Mipa PU 240-90 MIL.

Cleaning of tools:

Clean tools immediately after use with Mipa Nitroverdünnung.

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