PU 250-90 2K PU Topcoat gloss

Technical data sheet



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	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 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

Application mode					
application mode	hardener	pressure (bar)	nozzle (mm)	spray passes	dilution
gravity spray gun/ HVLP	PU 900 / 912 / 933	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	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%

Airmix/Airless

25 - 35 s 4 mm DIN

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

Version: en 2/0421

This technical data sheet is supplied for informational purposes only! According to our information, all data and recommendations correspond to the state of art and are based on years of experience in manufacturing our products. They do not exempt the user from his obligation to verify professionally, on his own responsibility, the suitability of our products to the intended purpose under prevailing conditions. Safety data sheets and warnings on packaging must be observed. We reserve the right to modify and to complete the information content at any time, without prior notice or obligation to update.

MIPA SE · Am Oberen Moos 1 · D-84051 Essenbach · Tel.: +49(0)8703/922-0 · Fax: +49(0)8703/922-100 · mipa@mipa-paints.com · www.mipa-paints.com

Technical data sheet



	Drying time						
()	hardener	object temperature	dust dry	set to touch	ready for assembly	sandable	recoatable
	-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		
	-40 / A 60	20 °C	1,5 - 2 h	8 - 10 h	24 h		
	-40 / A 60	60 °C			1 h		
	PU 933-05	20 °C	30 - 45 min	30 - 45 min	12 h		
	PU 933-10	20 °C	1,5 - 2 h	2 - 3 h	12 h		

Fully cured after 7 - 8 days (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 62 - 67 49 - 51 thixotropic 1,2 - 1,3 > 80 gloss	
Properties:	ong open time, high-build coating 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 :	 e: 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 μm dry film thickness 35,9 - 40,3 m²/kg, 4:1 by weight with PU 900-25, for 10 μm dry film thickness 44,3 - 45,6 m²/l, 4:1 by weight with PU 900-25, for 10 μm 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: < 500 g/l of VOC		
Processing conditions:	from+ 10 °C and up to 80 % relative hum	idity. Ensure adequate air ventilation.	

Version: en 2/0421
This technical data sheet is supplied for informational purposes only! According to our information, all data and recommendations correspond to the state of art and are based on
years of experience in manufacturing our products. They do not exempt the user from his obligation to verify professionally, on his own responsibility, the suitability of our
products to the intended purpose under prevailing conditions. Safety data sheets and warnings on packaging must be observed. We reserve the right to modify and to complete
the information content at any time, without prior notice or obligation to update.

MIPA SE · Am Oberen Moos 1 · D-84051 Essenbach · Tel.: +49(0)8703/922-0 · Fax: +49(0)8703/922-100 · mipa@mipa-paints.com · www.mipa-paints.com

PU 250-90 2K PU Topcoat gloss

Technical data sheet	
Substrate preparation:	Remove o



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 2½, 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.

Version: en 2/0421

This technical data sheet is supplied for informational purposes only! According to our information, all data and recommendations correspond to the state of art and are based on years of experience in manufacturing our products. They do not exempt the user from his obligation to verify professionally, on his own responsibility, the suitability of our products to the intended purpose under prevailing conditions. Safety data sheets and warnings on packaging must be observed. We reserve the right to modify and to complete the information content at any time, without prior notice or obligation to update.

MIPA SE · Am Oberen Moos 1 · D-84051 Essenbach · Tel.: +49(0)8703/922-0 · Fax: +49(0)8703/922-100 · mipa@mipa-paints.com · www.mipa-paints.com

PU 250-90 2K PU Topcoat gloss Technical data sheet

	rtoje8810hai Coafing Dystem8
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.

MIPA SE · Am Oberen Moos 1 · D-84051 Essenbach · Tel.: +49(0)8703/922-0 · Fax: +49(0)8703/922-100 · mipa@mipa-paints.com · www.mipa-paints.com



Version: en 2/0421