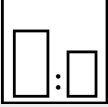








Intended use

Mipa EP 109-20 2K-EP-Haftgrundmittel (BAN80-1024) is a multi-purpose adhesion promoter that provides active corrosion protection and excellent adhesion on steel, zinc coated substrates, aluminium (also anodised), stainless steel, non-ferrous metals, chromed substrates, GRP, powder coatings and cathodic e-coatings. Mipa EP 109-20 offers large time savings thanks to the fast drying and overcoatability and because of its good flow, Mipa EP 109-20 can also be used as a primer in a two-coat system, if required.

Colour: Approx. RAL 1024 ochre yellow. Further colour shades on request.

Processing instructions

	Mixing ratio					
	hardener	by weight (lacquer : hardener)		by volume (lacquer : hardener)		
	EP 969-25	5 : 1		4 : 1		
	Hardener					
	Mipa EP 969-25 2K-EP-Härter (BAN93-0018)					
	Pot life					
	with Härter -25 max. 12 h at 20 °C					
	Thinner					
	Mipa Verdünnung 321 (BHN97-0002)					
	Mipa EP-Verdünnung, Mipa EP-Verdünnung lang*					
	Processing viscosity					
	The processing viscosity is adjusted with the specified thinner according to the conditions of the device/ line.					
	gravity spray gun			Airmix/Airless		
	--			--		
	Application mode					
	application mode	hardener	pressure (bar)	nozzle (mm)	spray passes	dilution
	gravity spray gun / HVLP	--	2,0 - 2,5	1,4 - 1,6	1	25 - 30 %
	paint pressure tank compound pressure	--	2,0 - 2,5 0,5 - 0,8	1,3 - 1,5	1	25 - 30 %
	Airmix / Airless compound pressure	--	1,0 - 2,0 70 - 100	0,28 - 0,33	1	10 - 20 %
	Drying time					
	hardener	object temperature	dust dry	set to touch	ready for assembly	sandable recoatable
	--	20 °C	10 - 15 min	3 - 4 h	16 h	-- 20 min
--	70 °C	--	--	--	-- --	

Note

Characteristics:	binder base: epoxy resin solids content (% by weight): ~ 64 solids content (% by volume): ~ 44 delivery viscosity DIN 53211 4 mm (in s): 45 - 55 density DIN EN ISO 2811 (kg/l): ~ 1,4 gloss level ISO 2813 at 60° (GU): < 20 mat
Properties:	active corrosion protection (zinc phosphate) electrostatic application possible excellent resistance to chemical and mechanical stresses heat resistance: - short-term heat exposure: 180 °C - permanent heat exposure: 150 °C adhesion to steel, zincd substrates, aluminium (also anodised), stainless steel, non-ferrous metals, chromed substrates, GRP, powder coatings and cathodic e-coatings.
Theoretical spreading rate:	~ 32,0 m ² /kg, 5:1 by weight with EP 969-25, for 10 µm dry film thickness ~ 39,3 m ² /l, 5:1 by weight with EP 969-25, 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:	< 525 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 coatings, conversion coatings, powder coatings, cathodic e-coatings and so on. The adhesion must therefore be tested on the original substrate. steel: - de-rust with hand and power tools to degree of cleanliness St 3 - degrease with Mipa WBS Reiniger or Mipa Silikonentferner zincd substrates: - clean the surface with the ammonia solution Mipa Zinkreiniger - sweep blast aluminium (also anodised), non-ferrous metals: - degrease with Mipa 2K-Verdünnung, sand thoroughly with sandpaper P 360/400 and clean subsequently with Mipa Silikonentferner stainless steel, chromed substrates: - degrease with Mipa 2K-Verdünnung, sand thoroughly with sandpaper P 240/360 and clean subsequently with Mipa Silikonentferner GRP, powder coatings and cathodic e-coatings: - clean (remove completely any mould release agents), if necessary, sand slightly and degrease with Mipa Silikonentferner

Proposed coating structure: 2-coat system***

steel, zincd substrates, aluminium (also anodised), stainless steel, non-ferrous metals, chromed substrates, GRP, powder coatings and cathodic e-coatings:

priming coat: EP 109-20 with 10 - 20 µm dry film thickness

finishing coat: ****PU 246-XX / PU 249-XX with 40 - 60 µm dry film thickness

3-coat system

steel, zincd substrates, aluminium (also anodised), stainless steel, non-ferrous metals, chromed substrates, GRP, powder coatings and cathodic e-coatings:

priming coat: EP 109-20 with 10 - 20 µm dry film thickness

intermediate coat: ****EP 175-20 / EA 184-20 with 40 - 60 µm dry film thickness

finishing coat: ****PU 246-XX / PU 249-XX with 40 - 60 µm dry film thickness

Special notes:

*To extend the flash-off times, the use of Mipa EP-Verdünnung lang as thinner is recommended. The use of the Mipa EP-Verdünnung lang also leads to a delay in drying times.

**This product has the following maximum VOC values:

- Undiluted with 2K-EP-Härter EP 969-25: < 540 g/l of VOC.

*** Due to the low dry film thickness, the use as primer in a 2-layer coating system is only recommended for corrosion-insensitive substrates or for use in ambient conditions with moderate exposure to corrosion.

**** Further Mipa intermediate/ finishing coats are available. Please contact your technical adviser or our application technicians.

For professional use only.

Flash-off: 10 - 15 min. prior to oven drying.

Recoatable at the earliest after 20 min & at the latest after 14 days. If drying for > 14 d, intermediate sanding required.

Can be overcoated with putty after 30 minutes at 60 °C or after 12 hours drying at room temperature.

If required we also offer 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 Verdünnung 321.