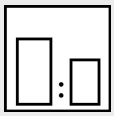
EP 164-20 2K EP HB Primer

Technical data sheet

Intended use

High-build 2K zinc phosphate epoxy primer for steel, zinced substrates, aluminium, GRP and mineral substrates. Suitable as priming coat even for both underwater and chemical protective coatings and as intermediate coating for EP zinc dust primers. Especially suitable for airmix/ airless application.

Processing instructions



Mixing ratio

hardener	by weight (lacquer : hardener)	by volume (lacquer : hardener)
EP 964-10	1 : 1	--

Hardener

Mipa EP 964-10 2K EP HB Hardener

Pot life

with hardener -10 approx. 5 h at 20 °C

Thinner

Mipa EP-Verdünnung, Mipa EP-Verdünnung lang

Processing viscosity

gravity spray gun	Airmix/Airless
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Application mode

application mode	hardener	pressure (bar)	nozzle (mm)	spray passes	dilution
gravity spray gun/ HVLP	--	2,0 - 2,5	1,5 - 2,5	2 - 3	5 - 10 %
Airmix / Airless compound pressure	--	1,0 - 2,0 100 - 120	0,28 - 0,33	1 - 2	0 - 5 %
paint brush, roller	--	--	--	--	0 - 5 %

Drying time

hardener	object temperature	dust dry	set to touch	ready for assembly	sandable	recoatable
--	20 °C	25 - 35 min	3 - 4 h	10 - 12 h	--	1 h
--	60 °C	--	--	45 min	--	--

Note

Characteristics:

binder base:	epoxy resin
solids content (% by weight):	~ 83
solids content (% by volume):	~ 70
delivery viscosity DIN 53211 4 mm (in s):	thixotropic
density DIN EN ISO 2811 (kg/l):	~ 1,5
gloss level ISO 2813 at 60° (GU):	< 20 matt

Version: en 5/0823

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Properties:	Active corrosion protection (zinc phosphate) Electrostatic application possible Suitable as insulation of thermoplastic substrates Applicable in thick layers (up to 300 µm DFT) Very good curing also when applied in thick layers Excellent resistance to chemical and mechanical strains Heat resistance: - Short-term heat exposure: 180 °C - Permanent heat exposure: 150 °C Adheres to steel, zinced substrates, aluminium and GRP
Theoretical spreading rate:	~ 38,6 m²/kg, 1:1 by weight with EP 964-10, for 10 µm dry film thickness. ~ 52,9 m²/l, 1:1 by weight with EP 964-10, 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:	< 260 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 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 withMipa 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. GRP: - Clean (remove completely any mould release agents), if necessary, sand slightly and degrease with Mipa Silikonentferner.

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Proposed coating structure:

2-coat system
Steel, zinced substrates:
Priming coat: EP 164-20 with 80 - 150 µm dry film thickness.
Finishing coat: **PU 264-XX with 80 - 150 µm dry film thickness.

Aluminium, GRP:
Priming coat: EP 164-20 with 50 - 70 µm dry film thickness.
Finishing coat: **PU 264-XX with 80 - 150 µm dry film thickness.

3-coat system
Steel, zinced substrates:
Priming coat: EP 164-20 with 80 - 150 µm dry film thickness.
Intermediate coat: EP 564-20 with 80 - 100 µm dry film thickness.
Finishing coat: **PU 264-XX with 80 - 100 µm dry film thickness.

Special notes:

*This product has the following maximum VOC-values:
- Applied by spraying with 2K-EP-Dickschichthärter EP 964-10: < 380 g/l of VOC.

**Further Mipa topcoats 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.

Recoatable at the earliest after 60 min at 20 °C and at the lastest after 7 days. After drying for more than 7 days, intermediate sanding is required.

Due to the nature of the system, colour deviations may occur because of the colour of the hardener EP 964-10 in the Mipa Pro Mix® Industry System, especially in case of bright shades.

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 EP-Verdünnung.

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