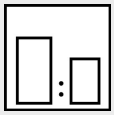
AK 105-20 Synthetic HB Zinc Phosphate Primer

Intended use

Fast-drying synthetic high-build primer with active corrosion protection (zinc-phosphate) for steel substrates. For interior and exterior use. Recoatable with Mipa 1K and 2K paints.

Processing instructions



Mixing ratio

hardener	by weight (lacquer : hardener)	by volume (lacquer : hardener)
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Hardener

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Pot life

2 days with Mipa Härterverdünnung

Thinner

Mipa UN-Verdünnung

Mipa Verdünnung UN 21

Mipa Härterverdünnung

Processing viscosity

gravity spray gun	Airmix/Airless
30 - 35 s 4 mm DIN	40 - 50 s 4 mm DIN

Application mode

application mode	hardener	pressure (bar)	nozzle (mm)	spray passes	dilution
gravity spray gun / HVLP	--	2,0 - 2,5	1,3 - 1,8	2 - 3	10 - 15 %
Airmix / Airless compound pressure	--	1,0 - 2,0 100 - 120	0,28 - 0,33	1 - 2	0 - 5 %
by brush, roller	--	--	--	--	0 %

Drying time

hardener	object temperature	dust dry	set to touch	ready for assembly	sandable	recoatable
--	20 °C	15 - 20 min	45 - 60 min	4 - 5 h	--	1 - 2 h (1 h for 1K paints, 2 h for 2K paints)
--	60 °C	--	--	30 min	--	--

Fully cured after 3 - 4 days (20 °C).

MIPA SE · Am Oberen Moos 1 · D-84051 Essenbach · Tel.: +49 8703 92 20 · Fax: +49 8703 92 21 00 · mipa@mipa-paints.com · www.mipa-paints.com

Note

Characteristics:	binder base:	alkyd resin
	solids content (% by weight):	~ 75
	solids content (% by volume):	~ 54
	delivery viscosity DIN 53211 4 mm (in s):	thixotropic
	density DIN EN ISO 2811 (kg/l):	~ 1,6
	gloss level ISO 2813 at 60° (GU):	< 20 matt

Properties:
Short drying time
Active corrosion protection (zinc phosphate)
Electrostatic application possible
High-build, excellent filling properties
High vertical stability
Short-term heat exposure 150 °C
Permanent heat exposure 120 °C
Adhesion on steel

Theoretical spreading rate:
~ 35,3 m²/kg for 10 µm dry film thickness.
~ 54,5 m²/l 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:
< 400 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 with Mipa WBS Reiniger or Mipa Silikonentferner.

Proposed coating structure:
Steel:
Priming coat: AK 105-20 with 50 - 60 µm dry film thickness.
Finishing coat: **AK 200 / AK 240 / AK 250 with 50 - 60 µm dry film thickness.

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Special notes:

*This product contains the following maximum VOC-values:
- Applied by spraying: < 490 g/l.

**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.

When alkyd resin (based) products are stored, a skin can form on the surface of the paint due to the system. This generally has no negative effects on the quality (material testing is recommended!).
If a skin has formed, it must be carefully removed before stirring (before tinting for bases) and the product must be sieved as required before application.

Do not overcoat with high-solid Mipa 2K topcoats.

Without top coating, the primed objects can be stored outside for approx. 5 days.

Cleaning of tools:

Clean tools immediately after use with Mipa Nitroverdünnung.

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