AK 105-20 Synthetic HB Zinc Phosphate Primer

Technical data sheet

Page 1 / 3



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)



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

30 - 35 s 4 mm DIN

Airmix/Airless

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).

Version: en 2/0723

AK 105-20 Synthetic HB Zinc Phosphate Primer

Technical data sheet

Page 2 / 3



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: $\sim 35,3$ m²/kg for 10 μ m 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 metal 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

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

AK 105-20 Synthetic HB Zinc Phosphate Primer

Technical data sheet

Page 3 / 3



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.

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.