AK 231-50 Synthetic Single-layer HS Topcoat semi gloss

Intended use

This oxidation-curing high-build one-layer paint with active protection against corrosion is suitable to apply thick coatings on steel constructions, cast parts, containers, machines, chassis, switchboards and so on which are made of steel, zinced steel and aluminium. For interior and exterior use. Low solvent content.

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

for application by paint brush / roller use Mipa KH-Verdünnung

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	1,7 - 2,5	2 - 3	0 - 10 %
Airmix / Airless compound pressure	--	1,0 - 2,0 100 - 120	0,36 - 0,54	1	0 - 5 %
by paint brush, roller	--	--	--	--	0 - 5 %

Drying time

hardener	object temperature	dust dry	set to touch	ready for assembly	sandable	recoatable
--	20 °C	2 - 3 h	8 - 10 h	--	--	--

Fully cured after 8 - 10 days (at 20 °C).

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Note

Characteristics:	binder base:	modified alkyd resin
	solids content (% by weight):	~ 77
	solids content (% by volume):	~ 61
	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):	30 - 45 semi-gloss

Properties:

highly resistant to UV and weathering
can be applied in thick layers
active corrosion protection (zinc phosphate)
resistant to petrol and diesel if exposed temporarily
short-term heat exposure 150 °C
permanent heat exposure 130 °C
adhesion on steel, zinced substrates and aluminium

Theoretical spreading rate : ~ 44,1 m²/kg for 10 µm dry film thickness
~ 60,7 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: < 340 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 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 P 360 / 400 and clean subsequently with Mipa Silikonentferner

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Proposed coating structure:

single-coat system
steel, zinced substrates and aluminium:
AK 231-50 with 80 - 100 µm dry film thickness

two-coat system
steel:
priming coat: **AK 105-20 / AK 100-20 with 60 - 80 µm dry film thickness
finishing coat: AK 231-50 with 80 - 100 µm dry film thickness

zinced substrates:
priming coat: **EP 100-20 with 50 - 70 µm dry film thickness
finishing coat: AK 231-50 with 80 - 100 µm dry film thickness

aluminium:
priming coat: **EP 100-20 with 25 - 30 µm dry film thickness
finishing coat: AK 231-50 with 80 - 100 µm dry film thickness

Special notes:

*This product contains the following maximum VOC-values:
- Applied by brush/ roller: < 410 g/l.
- Applied by spraying: < 430 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.

Applying too thick layers may extend considerably the drying time.

Check colour shade prior to application.

The special coating AK 231-50 has its origin in coating galvanised constructions and is characterised by a high flexibility and specific permanent plasticity.

Cleaning of tools:

Clean tools immediately after use with Mipa Nitroverdünnung.

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