Intended use

This 2K epoxy resin finishing coat is free from solvent and is used to create a glossy, self-levelling coating on mineral substrates (floor coating in workshops, warehouses, and industrial facilities). Can be applied by paint brush or trowel or notched trowel.

Processing instructions

Mixing ratio

hardener	by weight (lacquer : hardener)	by volume (lacquer : hardener)
EP 975-25	5 : 1	--

Hardener

Mipa EP 975-25

Pot life

with hardener -25 aprox. 40 - 60 min at 20 °C

Thinner

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Processing viscosity

gravity spray gun	Airmix/Airless
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Application mode

application mode	hardener	pressure (bar)	nozzle (mm)	spray passes	dilution
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Drying time

hardener	object temperature	dust dry	set to touch	ready for assembly	sandable	recoatable
--	20 °C	15 - 30 min	40 - 60 min	walkable after 12 h	--	within 24 h

fully resistant to mechanical stress and chemical agents after 7 days

Note

Characteristics:

binder base:	epoxy resins
solids content (% by weight):	~ 95
solids content (% by volume):	~ 92
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):	> 80 glossy

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Properties:	excellent resistance to mechanical stress and chemical agents highly resistant to abrasion, adapted to fork lift traffic resistant to petrol, oil and tar resistant to frost and to de-icing salt decontaminable largely resistant to solvents, dilute acids and bases heat-resistant to damp heat and liquids (water) 40 °C heat resistance: - short-term heat exposure: 130 °C - permanent heat exposure: 100 °C adhesion to concrete
Theoretical spreading rate:	~ 65,6 m²/kg, 5:1 by weight with EP 975-25, for 10 µm dry film thickness ~ 94,1 m²/l, 5:1 by weight with EP 975-25, for 10 µm dry film thickness
Storage:	For at least 2 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:	< 82 g/l.*
Processing conditions:	Do not apply at a object temperature below + 10 °C or above + 30 °C. The substrate temperature must be minimum 3 °C above the dew point temperature of the air during the application and drying process (DIN EN ISO 12944-7). The relative air humidity must not exceed 80 %. Ensure adequate air ventilation. Application of primer and paint should only be done at constant or decreasing temperatures to reduce the risk of blistering due to air heating in the pores of the substrate. (This also applies to all indoor applications that are exposed to the sun).

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Substrate preparation:

Substrate characteristics:
- Mineral substrates (set, dimensionally stable, rough and solid) must be free from friable parts and other substances that may affect the adhesion (e.g. rubber marks, greases, oils, rust, dust and similar).
- The equilibrium moisture content must have been achieved (concrete, cement screed < 4 % by weight, anhydrite screed < 0.3 % by weight, magnesite floor < 4 % by weight).
- The bond strength must be > 1.5 N/mm² .
- The compression strength of the substrate must be > 25 N/mm².
- Ensure perfect insulation against earth moisture.

Check for laitance or brittle, non-adherent layers:
- By scratching the surface with a sharp device or a needle at different spots.

Result:
- Brittle layer of approx. 1mm underneath a thin hard surface.

Repair:
- Remove area mechanically by shot-blasting or milling to a solid substrate.
- Remove area by acid washing (apply a solution of hydrochloric acid (10 %), then wash again with clear water) to a solid substrate.

Check for dense concrete surfaces (smooth, hard and almost “shiny”):
- Test the absorbency by scratching and wetting at different spots.

Result:
- Only the scrapes become darker (indicates the absorption) and the area around the scratches show no absorption.

Repair:
- These dense layers must be removed mechanically by shot-blasting or milling until perfect absorbency is achieved.
- Remove area by acid washing (apply a solution of hydrochloric acid (10 %), then wash again with clear water) until perfect absorbency is achieved.

Oil, grease, wax and residues of soapsuds:
- Wash by using a cleaning agent (do not use products which contain care additives such as wax, silicone, a.s.o.) and repeat the operation if necessary.
- Sometimes deep penetrated substrates are impossible to clean. Remove by milling heavily contaminated areas and renew.

The pores have to be open and free of dust:
- Clean the surface by using a powerful industrial vacuum cleaner. This is particularly important when the floor has been treated mechanically.

Old paintworks:
- Sand slightly well adherent 2K-coatings. Test compatibility (on a sample area).
- Damaged coatings must be removed completely (mechanically or by paint remover).

Proposed coating structure:

Roller application (smooth)**
priming coat: EP 150-70
finishing coat: EP 275-70 with 200 - 1000 µm dry film thickness

roller application (antislip)***
priming coat: EP 150-70
finishing coat: EP 275-70 with 200 - 1000 µm dry film thickness

as self-levelling compound ****
priming coat: EP 150-70
finishing coat: EP 275-70 with 1000 - 4000 µm dry film thickness

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Special notes:

*This product contains the following maximum VOC-values:
- As self-levelling material with 2K-EP-Dickschichthärter EP 975-25: < 80 g/l of VOC.

**If the topcoat cannot be applied within 24 hours, the priming coat Mipa EP 150-70 must be sanded slightly to a matt finish.

***Scatter Mipa Quarz Additiv or Mipa Grip Substrat (consumption: approx.. 1 kg/ m²) on the still wet priming coat Mipa EP 150-70. After complete drying, apply the finishing coat Mipa EP 275-70 by roller.

****If the subsequent coat can't be applied within 24 hours, the surface must be sanded or just scatter Mipa Quarz Additiv or Mipa Grip Substrat (consumption: approx.. 1 kg/ m²) on the still wet priming coat Mipa EP 150-70. Remove completely the excess sand by sweeping or vacuuming prior to next workstep. Pour Mipa EP 275-70 already mixed with hardener into another container, add Mipa Quarz-Additv observing the mixing ratio: 2:1 by weight. Pour this self-levelling compound on the priming coat and spread it uniformly using a notched trowel. After approx. 20 minutes deaerate the coating using a spike roller.

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.

Mix the product with the hardener thoroughly using a low speed electric stirrer (less than 400 RPM). Pour the mixed material in a new clean container and mix again thoroughly.
Make sure that both components have been mixed sufficiently - if not, this could result in staining.

Weathering causes after a relatively short time chalking and colour changes. Chalking is not detrimental to the resistance of the coating. Re-coating with PU 250-50 may protect against chalking and colour changes.

Scattering Mipa Grip Substrat on the surface creates an anti-slip coating.

Blister can be avoided during the application by thoroughly priming and processing at decreasing temperature.

During curing, protect coating from humidity (fog, rain). High air humidity and low temperatures may cause clouding on the surface. This effect may lead to intermediate adhesion problems and must therefore be removed before recoating by means of wash water (water and washing-up liquid). Deaerate the still flowing coating by means of a spike roller.

To minimize shrinkage (e.g. when pre-filling damages such as cracks and gaps larger than 5 mm) just add Mipa Grip Substrat.

When adding Mipa EP-Verdünnung the solvent smell can increase.

Check colour shade prior to application.

The pot life depends on the mass/volume – the higher the mass the shorter the pot life; higher temperatures reduce and lower temperatures extent the pot life. The product must not cross-link in a plastic container (development of heat during the curing in thick layers).

Cleaning of tools:

Clean tools immediately after use with Mipa EP-Verdünnung.

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