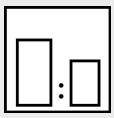
EP 150-70 2K EP Seal Primer transparent

Intended use

Solvent-free, transparent 2K liquid epoxy resin suitable as primer and sealer on mineral substrates, for filling up fissures and reprofiling defective substrates.

Coulour: colourless.

Processing instructions



Mixing ratio

hardener	by weight (lacquer : hardener)	by volume (lacquer : hardener)
EP 975-25	2 : 1	1,8 : 1

Hardener

Mipa EP 975-25 2K EP Hardener

Pot life

with EP 975-25 approx. 15-30 min at 20°C

Thinner

Mipa EP-Verdünnung, Mipa EP-Verdünnung lang (only for slightly absorbent mineral substrates)

Processing viscosity

gravity spray gun	Airmix/Airless
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Application mode

application mode	hardener	pressure (bar)	nozzle (mm)	spray passes	dilution
spatula, trowels, squeegee, paint brush, roller*	--	--	--	--	--

Drying time

hardener	object temperature	dust dry	set to touch	ready for assembly	sandable	recoatable
--	20 °C	--	--	walkable after 12 -16 h	--	within 24 h

fully resistant to mechanical and chemical stresses after 7 days

Note

Characteristics:

binder base:	epoxy resin
solids content (% by weight):	100
solids content (% by volume):	100
delivery viscosity DIN 53211 4 mm (in s):	thixotropic
density DIN EN ISO 2811 (kg/l):	~ 1,2
gloss level ISO 2813 at 60° (GU):	> 70 satin gloss

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Properties:	Excellent resistance to chemical and mechanical strains Highly abrasion-resistant Resistant to fuel, oil, tar Resistant to frost and to de-icing salt Resistant to permanent humidity High penetration depth Largely resistant to solvents, dilute acids and bases Heat-resistant to damp heat and liquid (water) 40°C Heat resistance: - Short-term heat exposure: 130 °C - Permanent heat exposure: 100 °C
Theoretical spreading rate:	~ 93,5 m²/kg, 2:1 by weight with EP 975-25, for 10 µm dry film thickness. ~ 98,8 m²/l, 2:1 by weight with EP 975-25, 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:	0 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:

Priming normally absorbent, mineral substrates:**
Priming coat: EP 150-70 with 200 - 300 µm dry film thickness.
Finishing coat: EP 275-70.

Priming slightly absorbent, mineral substrates:***
Priming coat: EP 150-70 incl. hardener, thinned with to 20 % of EP-Verdünnung approx. 200 - 300 µm dry film thickness.
Finishing coat: EP 275-70.

Sealing:****
1 - 2 x EP 150-70 with 400 - 500 µm dry film thickness.

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Special notes:

*Suitable: roller, brush, burnhole roller, serrated spatula, pin rake.

**Priming normally absorbent, mineral substrates:
Pour mixed material on the surface and brush into the surface. If necessary, apply a second layer by pouring or by means of a whitewash brush.

***Priming slightly absorbent, mineral substrates:
Add up to 20 % of Mipa EP-Verdünnung or Mipa EP-Verdünnung lang (thinner) to mixed material and brush into the surface. If necessary, apply a second layer by pouring or by means of a whitewash brush.

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

****Sealing:
Apply mixed material in 1 - 2 layers (pour on the surface and spread evenly with a rubber squeegee). For a anti-slip sealing, just scatter Mipa Grip-Substrat on the first, still wet coat.

Scatter quartz sand (grain size: 0,06 - 0,3 mm; consumption: approx. 1 kg/m²) for the subsequent self-levelling coating applied by serrated squeegee (Mipa EP 275-70). Remove thoroughly the surplus sand by sweeping or vacuuming before continuing the coating. Apply the subsequent coat at earliest after 8 hours and at latest after 72 hours. Surfaces which have not been sprinkled must be re-coated within 24 hours.

For professional use only.

Mix intensively the basic paint with the hardener for at least 3 minutes using a mechanical stirrer. After that, pour the material in another clean container and mix again.

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).

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

Protect coating during the curing 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).

Weathering causes after a relatively short time chalking and colour changes. Chalking is not detrimental to the resistance of the coating.

Dyestuffs (for ex. in coffee, red wine, foliage and so on) and chemicals (such as acids, disinfectants and similar) may cause colour changes. The functionality of the coating won't be affected.

Surfaces, on which Flock Chips have been scattered, are not suitable for garages and storehouses (as they are only suitable for foot traffic).

Cleaning of tools:

Clean tools immediately after use with Mipa EP-Verdünnung.

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