

RINOL *EP-P201*

1 General Information

Product Description and Use

RINOL EP-P201 is a ready-to-use, low-viscous 2-component primer based on solvent-free epoxy resin. After mixing with the appropriate hardener, RINOL EP-P201 can be used for the priming of mineral, adsorbent substrates for all RINOL systems apart from polyester. The product is also suitable as a binder for scratch coatings, levelling mortars and high-filled mortar systems. RINOL EP P201 is characterised in particular by excellent wetting and adhesion properties. RINOL EP-P201 is suitable with substrate residual moistures in cement systems of up to 4.0 % and in anhydrite-bonded systems up to 0.5 % (measured by the CM method).

2 Laying Instructions

Substrate Preparation

The substrate must exhibit a sufficient load-bearing capacity. We recommend a minimum strength corresponding to a concrete B25 or screed strength class ZE, ME, AE30.

The bond and adhesion of the EP resin onto a mineral substrate is based on an anchorage over the roughness depth and good penetration into the substrate. High-strength, vacuumed or extremely smoothed and very dense concrete surfaces require more intensive substrate preparation.

As a matter of principle it must be checked whether the substrate is open-pore, porous, etc. since in these cases 2 or more applications are necessary in order to obtain optimal pore closure. It is fundamental to ensure that there are no open pores in order to avoid the formation of bubbles in the subsequent coatings. A sample should be applied to a test area in each case.

This also applies to highly absorbent and/or porous substrates. The substrate must be prepared by shot-peening. Coarse impurities can be removed by milling.

RINOL EP-P201 can be applied directly onto the cement-bonded substrate if the substrate moisture content does not exceed max. 4.0 % (measured by the CM method). The substrate must have an adhesive pull strength of at least 1.5 N/mm². In addition, it must be free from oily, fatty or release-agent-containing impurities, loose particles, etc. Cracks and hollow spots must be properly remedied beforehand.

Care should be taken to ensure that no silicone-containing or other materials which could interfere with the reaction come into contact with RINOL EP 201 both before and during the curing phase.

Our products are "total solid" in accordance with the test method of Deutsche Bauchemie e.v.

Technical Data

Liquid mixture (A+B)

1. Density (23°C)	approx. 1.1 g/cm ³
2. Packaging unit size (2-component container)	20 kg container or barrel
3. Shelf life/storage	12 months at 5–20°C, store above freezing and out of direct sunlight (even during transport)

Technical Data

Cured material

1. Adhesive pull strength (DIN ISO 4624)	> 1.5 N/mm ²
2. Compressive strength (DIN EN 196) (curing 7 days/23°C)	approx. 65 N/mm ²
3. Bending tensile strength (DIN EN 196) (curing 7 days/23°C)	approx. 33 N/mm ²

Technical Data

Liquid mixture (A+B)

1. Processing time (20°C)	approx. 20- 25 minutes
2. Processing/material/room temperature:	15–25°C (min. 3 degrees above the dew point, even during laying and curing)
3. Material consumption/per application Primer	300–500 g/m ²
4. Can be walked on (20°C)	after 12-15 hours
5. Subsequent layer (20°C)	within 12–24 hours
6. Rel. humidity	< 80% during the entire laying and curing phase

Manufacturer:

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Processing

The product is supplied in 2-component containers in the exact mixing ratio.

Before processing, the material must be heated at least to ambient temperature (room and floor temperature).

The B-component must be emptied completely into the A-component. After mixing using a suitable electric stirring tool (approx. 3-4 min), the mixture is poured into a different container and stirred again briefly.

Priming:

The primer compound is then poured, in portions, onto the surface to be coated and spread using a spatula or a rubber spreader. The primer should be rerolled using a short-pile fur fabric roller. The primer must be applied so as to form a film and be free from pores, for example in the case of air-entrained concrete a specific substrate preparation is required. Depending on the substrate, a number of applications may be necessary. To cover vertical surfaces, add approx. 1-3% RINOL X965. To improve inter-layer adhesion the liquid primer is sprinkled with silica sand RINOL QS20 (0.3-0.8 mm) (consumption approx. 0.5-1.0 kg/m²).

Note:

- When reworking with levelling coatings do not sand in excess
- When reworking with conductive layers do not sand

Filled coating/levelling mortar:

RINOL EP P201 is mixed with silica sand as required, poured onto the surface to be coated and spread over the area in the desired layer thickness using a spatula, a smoothing spreader or a trowel.

Synthetic resin mortar:

The mixing ratio of binder/filler can be varied between 1:9 and 1:7 depending on temperature. The synthetic resin mortar is applied in the usual manner onto the primer scattered with silica sand RINOL QS20 (approx. 1000g/m²), spread and then smoothed out.

If RINOL EP P201 has to be filled, the applicator should carry out a local test in order to ensure the desired result. The technical data may vary depending on the degree of filling/filler.

Reworking

Before applying the next layer excess silica sand must be removed completely. If reworking the layer within 24 hours following application, the primer need not be sanded further. If the next layer is to be applied more than 24 hours following application of the primer, the primer must be covered entirely with silica sand RINOL QS20 (consumption approx. 0.5-1.0 kg/m²) or accordingly ground down and the sanding dust suctioned off. In the case of the synthetic resin mortar, fresh must be worked into fresh, or fire-dried silica sand scattered over the fresh primer (for example 0.3-0.8 mm or 0.7-1.2 mm) depending on the layer thickness of the synthetic resin mortar.

Safety measures

For information on handling the product please refer to the valid safety data sheet and the Chemicals Regulations regarding the handling of coating materials (M004/M023). Suitable protective clothing and goggles must be worn during processing.

Skin contact with liquid resins can be harmful to health and may lead to allergies.

Possibilities for layering and detailed information about the application of RINOL products can be found in the RINOL Technical Guide.

Note

The specification values given are approximate values ascertained by us and do not constitute a guarantee of properties. Consequently, no liability claims may be derived from the product data sheet.

EP resins are not generally colour-stable in the long term under the effects of UV and weathering. Surfaces exposed to chemical and mechanical stress are subject to wear caused by use. In this case regular maintenance is recommended.

Consumption amounts, processing time, the time until the floor can be walked on and the point at which load-bearing capacity is reached are dependent on temperature and on the object. Please also note that only the most recent version of the technical data sheet is valid and replaces all previous data sheets.

Important note

In addition to ambient temperature, floor temperature is of key importance. As a basic principle the chemical reactions are delayed at low temperatures. The reworking time and the time until the floor can be walked on are thus extended. Higher viscosities of the products also cause an increase in material consumption.

At higher temperatures the chemical reactions are shortened and the reworking time and the time until the floor can be walked on are reduced.

The material should generally be protected during processing against exposure to water. Furthermore, the material must be protected against direct exposure to water for approx. 24 hours (at 20 °C) following application. During this period exposure to water (for example dew, condensation) could lead to whitening (carbamate formation) on the surface or the surface could become sticky at these points and this could impair adhesion to subsequent coatings.

As a basic principle, protect against the infiltrating action of moisture from the rear face, including during use.

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Legal note:

Owing to the different materials, substrates and differing working conditions, no guarantee in terms of result or adhesion for whatever reason and/or legal nature can be assumed by RINOL.

For the rest, the most recent general terms of business of RINOL Italia Research & Technology and RINOL GmbH apply and can be requested from us or viewed, in their most recent version, at www.rinol.com and printed out. We reserve the right to make changes to the product specifications.

CE marking:

DIN EN 13813 "screed mortars, screed materials and screeds - properties and requirements" (Jan. 2003) specifies requirements of screed mortars which are used for floor constructions in interior spaces. This standard also covers synthetic resin coatings and sealants. Products which conform to the above-mentioned standard are provided with the CE marking.

 RINOL Italia Research & Technology Srl Via Chiarugi 76/U I-45100 Rovigo
05 ¹ EN 13813 SR-B1,5 -IR4
1119-CPR-0833 09 EN 1504-2



Synthetic resin screed/coating for internal use in buildings (superstructures in accordance with techn. data sheets)	
Reaction to fire	B _{FL} -S1
Water permeability	NPD ²
Abrasion resistance	NPD ²
Bond	B 1.5
Impact resistance	IR 4
Impact sound insulation	NPD ²
Noise absorption:	NPD ²
Chemical resistance	NPD ²

-1) the last two numbers of the year in which the CE marking was applied

-2) NPD = no performance determined;

CE marking: 1504-2

Flooring systems which are subjected to mechanical stresses and products thereof which comply with DIN EN 1504-2 must also satisfy the requirements of DIN EN 13813.

DIN EN 1504-2 "products and systems for the protection and maintenance of concrete structures – part 2: surface protection systems for concrete" specifies the requirements for the surface protection methods "hydrophobing impregnation", impregnation and coating.

The relevant data sheet can be requested as necessary.

GIS Code: WGK RE 1

Further information regarding the GIS code can be obtained from Wingis online at <http://www.wingis-online.de/wingisonline/>

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