

RINOLEP-QC213

LOW-VISCOSITY EPOXY FLOOR PRIMER

RINOL



1 General Information

Product Description and Use

RINOL EP-QC 213 is a ready-to-use, low-viscosity, defoamed, two-component base coat based on a solvent-free epoxy resin for the RINOL GFR floor system. RINOL EP-QC 213 is characterised by its excellent wetting and adhesive properties in particular.

It can be supplied in different RAL and NCS shades, and is suitable for use with residual moisture in cement systems of up to 4.0% and anhydrite-bonded systems of up to 0.5% (measured by the CM method).

2 Laying Instructions

Substrate preparation

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

The adhesion of epoxy resin to a mineral substrate depends on anchorage through roughness and good penetration into the substrate. High-strength, vacuumed, extremely smoothed or very dense concrete surfaces require more intensive preparation of the substrate. In principle, it must be checked whether the substrate is open-pore or porous, since in these cases two or more applications are generally necessary to achieve optimal pore closure. It is essential to ensure there are no open pores to prevent bubbles forming in subsequent coatings. A sample should always be applied to a test area. The same applies to highly absorbent and/or porous substrates.

The substrate must be prepared by shot-peening. Coarse impurities can be removed by milling. The substrate must have an adhesive pull strength of at least 1.5 N/mm². It must also be free from oily, fatty or release agent impurities, loose particles, etc. Any cracks or hollow spots must be properly remedied beforehand.

Ensure that no silicone-containing materials or other substances that could interfere with the reaction come into contact with RINOL EP QC 213, either before or during the curing phase.

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Processing

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

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

The B component should be emptied completely into the A component. After mixing for approximately 3–4 minutes using a suitable electric stirring tool, the mixture should be poured into a different container and stirred briefly again.

Once RINOL EP QC 213 has been filled, the applicator should carry out a local test to ensure the desired result is achieved. Please note that the technical data may vary depending on the degree of filling/filler.

Reworking

Before applying the next layer, all excess silica sand must be completely removed. If reworking the layer within 24 hours of application, further sanding of the primer is not necessary. However, if the next layer is to be applied more than 24 hours after the primer has been applied, it must be covered entirely with RINOL QS 20 silica sand (consumption approx. 0.5–1.0 kg/m²) or ground down accordingly, with the sanding dust then suctioned off. When working with synthetic resin mortar, it is important to ensure that

Technical data		
Liquid mixture (A+B)		
1	Density (23°C)	approx. 1.19 g/cm ³
2	Packaged unit size (2-component container)	25 kg containers or barrels
3	Colours	see RINOL colour chart, others on request
4	Shelf life/storage	12 months at 5–20°C always store above freezing and out of direct sunlight (even during transport)v

Technical data		
Cured material		
1	Adhesive pull strength (DIN ISO 4624)	> 1.5 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: see respective laying instructions	RINOL GFR
4	Can be walked on (20 °C)	after 6–12 hours
5	Subsequent layer (20°C)	within 12–24 hrs
6	rel. humidity	< 75% (during the entire laying and curing phase)

the primer is fresh and that fire-dried silica sand (for example, 0.3–0.8 mm or 0.7–1.2 mm) is scattered over it.

Safety Measures

For information on how to handle the product, please refer to the relevant safety data sheet and the chemicals regulations regarding the handling of coating materials (M004/M023). Wear suitable protective clothing and goggles during processing.

Skin contact with liquid resins can harm health and may cause allergies.

Information on layering possibilities and the application of RINOL products can be found in the RINOL Technical Guide.

Note

The specification values provided are approximate and are not a guarantee of the product's properties. Consequently, no liability claims may be derived

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from the product data sheet.

EP resins are generally not colour-stable in the long term when exposed to UV rays and weathering. Surfaces exposed to chemical and mechanical stress will show signs of wear and tear. Regular maintenance is recommended in this case.

Consumption amounts, processing time, the time until the floor can be walked on, and the point at which load-bearing capacity is reached depend on temperature and the object in question.

Please note that only the latest version of the technical data sheet is valid and supersedes all previous versions.

Important note

In addition to ambient temperature, floor temperature is also very important. As a general rule, chemical reactions are slower at low temperatures. This extends the reworking time and the time until the floor can be walked on. Higher product viscosities also increase material consumption.

At higher temperatures, however, the chemical reactions are accelerated, reducing the reworking time and the time until the floor can be walked on.

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

Please note that only the latest version of the technical data sheet is valid and supersedes all previous versions.

Legal note:

The technical data for the company's products has been compiled with due care. However, any recommendations or suggestions made with regard to the use of these products are made without guarantee as the conditions under which they are used are beyond the control of the Company. It is the responsibility of the customer to determine whether the products are suitable for the particular application and whether the conditions of use are appropriate for the particular product. No liability can therefore be derived from the product data sheet.

Please note that only the latest version of the data sheet is valid and replaces all previous versions. The technical data given are approximate values determined by us and do not constitute a guarantee of properties. Misprints, errors, translation errors and changes reserved. Please note that the information in the system datasheets may differ in different languages/countries. For further information, please visit our website at www.rinol.com

The technical data sheet does not exempt the user from carrying out his own application tests, if necessary, within the limits of his capabilities. Please refer to the RINOL Technical Guide for information on coating options and more detailed information on the installation of RINOL products.

CE labelling:

DIN EN 13813, 'Screed mortars, screed materials and screeds – Properties and requirements' (January 2003), specifies the requirements for screed mortars used in interior floor constructions. The standard also covers synthetic resin coatings and sealants. Products that comply with this standard are provided

with the CE marking.

 RCR Flooring Products Italia S.r.l. Via Chiarugi 76/U I-45100 Rovigo
10 ¹ EN 13813 SR-B1,5 -IR4

Synthetic resin screed/coating for indoor use in buildings (structures according to technical data sheets)	
Fire behaviour:	B _{FL} -S1
Water permeability:	NPD 2
Wear resistance (Abrasion Resistance):	NPD 2
Tensile bond strength:	B 1.5
Impact resistance	IR 4
Impact sound insulation:	NPD 2
Sound absorption:	NPD 2
Chemical resistance:	NPD 2

-1) the last two digits of the year in which the CE marking was affixed.

-2) NPD = No Performance Determined; characteristic value not specified

CE marking: 1504-2

Flooring systems subjected to mechanical stresses, and the products thereof, must comply with DIN EN 1504-2 and 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 'hydrophobic impregnation', impregnation, and coating. The relevant data sheet is available on request.

European Regulation 2004/42 (Decopaint Directive)

The maximum VOC content (product category IIA/j, type SB) permitted by European Regulation 2004/42 is 500 g/l (limit in 2010) in the ready-to-use state. The maximum VOC content of RINOL EP-QC213 in its ready-to-use state is less than 500 g/l.