



1 General data

Product description / Application

RINOL EP C531-EW is a pigmented, ready-to-use, diffusible, waterborne 3-component epoxy resin topcoat. Thanks to its special formulation, RINOL EP C531-EW can be used as a self-levelling topcoat for damp substrates. It allows the substrate to breathe and moisture to escape. The coating has good resistance to fuels, lubricants, most solvents and chemicals.

RINOL EP C531-EW is used as a top layer for industrial floors with damp substrates as well as mechanical and hygienic requirements.

No pressing water and/or water in liquid form may rise from the substrate. This also applies to magnesia screeds. The constructive minimum layer thickness of the magnesia screed must be observed (generally > 1.5 cm). RINOL EP C531-EW is suitable for residual substrate moisture in cementitious systems up to 4.0%, in anhydrite-bound systems up to 0.5% (measured using the CM measuring method).

2 Laying instructions

Substrate preparation

The substrate must be sufficiently stable. The surface tensile strength of the surface to be primed must be at least 1.5 N/mm² on average, the compressive strength at least 25 N/mm². The substrate must be clean and free of separating agents.

It must always be checked whether the substrate is open-pored, porous or similar, as this can lead to the formation of bubbles or pores in the coating. This must be checked by the applicator and eliminated if necessary.

Before applying RINOL EP-C531 EW, the substrate is primed with a primer RINOL EP-P240 according to the respective product data sheets.

If a levelling coat is required, RINOL EP-C531 EW can also be used as a levelling coat. In this case, RINOL EP-C531 EW can be filled with QS (e.g. 0.3-0.8 mm). In any case, we recommend carrying out tests on site before application and or contacting a RINOL technician.

The topcoat RINOL EP-C531 EW must be applied no later than 24 hours at (20°C) after the previously applied layer. The substrate must be film-forming and non-porous, otherwise bubbles and/or pores may form due to the air rising from the substrate.

Ensure that no substances containing silicone or other substances that may interfere with the reaction come into contact with RINOL EP-C531 EW before and during the curing phase.

Processing

The product is supplied in 3-component containers in coordinated quantities.

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

The A-component must be stirred for 2-3 minutes, then the B-component is completely emptied into the A-component. Both components are mixed homogeneously for at least 2-3 minutes using a suitable electric mixer. The C component is then added during mixing. Avoid stirring in air. Then slowly add 1 litre of water while stirring continuously. The mixture must be decanted and then stirred well again.

Technical data		
Liquid mixture (A+B+C)		
1	Container size (2-component container)	25 kg container
2	Colours	RINOL colour chart, others on request
3	Shelf life / storage	6 months at 5-20°C, in any case (also during transport) frost-free, protect from direct sunlight

Technical data		
Liquid mixture (A+B+C)		
1	Density (20°C)	approx. 1.70 g/cm ³
2	Processing time (20°C)	approx. 35 minutes
3	Processing / material and room temperature	15-25°C (min. 3 degrees above dew point also during laying and curing)
4	Material consumption	approx. 3,200 g/m ² /2mm
5	Walkability (20°C)	after approx. 24 hours
6	Rel. humidity	< 70% during the entire laying and curing phase

Technical data		
Cured material		
1	Compressive strength (DIN EN 196)	approx. 45 N/mm ²
2	Flexural tensile strength (DIN EN 196)	approx. 30 N/mm ²
3	Adhesive peel strength (DIN ISO 4624)	> 1,5 N/mm ²
4	Shore D hardness (DIN 53505 / ASTM D 2240)	approx. 65
5	full load capacity mechanical (23°C) chemical (23°C)	after 7 days after 28 days

RINOL EP-C531-EW is poured onto the surface to be coated and applied with a Polyplan No. 48 notched trowel in the appropriate layer thickness of approx. 2.0 mm.

In order to achieve uniform layer thicknesses, the toothed strips of the trowel should be checked regularly and replaced if necessary. Then deaerate with a spiked roller. The applicator should wear spiked shoes to be able to walk on the wet coating.

Recoating

When reworking up to 24 hours after installation, the top layer does not need to be sanded. If there is a longer waiting time of >24 hours between the individual work steps or if surfaces already treated with liquid synthetic resins are to be recoated after a longer period of time, the old surface must be cleaned well, sanded thoroughly and vacuumed.

Maintenance

To maintain the properties of the synthetic resin floor covering in the long term, we recommend regular maintenance. Please ask for our RINOL care instructions.

Colour shade

Almost all colour shades are possible. Slight colour deviations are unavoidable due to the raw material. Colour deviations may occur permanently with light shades of colour, e.g. in the yellow or orange range, due to filling with quartz sand. Epoxy resins are generally not permanently colour-stable or tend to yellow when exposed to UV and weathering. Artificial UV light can also change the colour and also lead to yellowing. The technical properties remain unchanged.

Protective measures

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

Skin contact with liquid resins can lead to health problems and allergies.

Notes

Due care has been taken in compiling the technical data for the company's products. However, all 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 company's control. It is the responsibility of the customer to check whether the products are suitable for the respective application and whether the conditions of use are appropriate for the respective product. No liability claims can therefore be derived from the product data sheet.

We would also like to point out that only the latest version of the data sheet is valid and replaces all older data sheets. 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 data sheets of the different languages / countries may differ. Further information can be found on our website at www.rinol.com

EP resins are generally not colour-stable in the long term under UV and weathering influences. Chemically and mechanically stressed surfaces are subject to wear and tear due to use. Regular maintenance is recommended. Consumption quantities, processing time, walkability and achievement of load-bearing capacity depend on temperature and object.

The technical data sheet does not exempt the user from carrying out his own tests - if necessary, within the scope of his possibilities - with regard to applicability. Please refer to the RINOL Technical Guide for layer build-up options and more detailed information on the installation of RINOL products.

Important note

In addition to the ambient temperature, the floor temperature is of decisive importance.

Chemical reactions are generally delayed at low temperatures. This extends the recoating and walkability times. The higher viscosity of the products also increases material consumption.

At higher temperatures, the chemical reactions are shortened and the recoating and walkability times are reduced.

The material must always be protected from water during application. Furthermore, the material must be protected from direct contact with water for approx. 24 hours (at 20°C) after application. Within this time, exposure to water (e.g. also dew, condensation) can lead to white discoloration (carbamate formation) on the surface or the surface is sticky at these points and this can impair adhesion to subsequent coatings.

Applications that are not clearly mentioned in this technical data sheet may only be carried out after consultation and written confirmation with or by the application technology department of RCR Flooring Products Italia S.r.l.

Always protect against the effects of moisture from the rear and from pressure, even during use.

For better cleanability, we recommend applying RINOL PU-TS686.

Legal information:

Due to the different materials, substrates and deviating working conditions, RCR Flooring Products Italia S.r.l. or RCR Flooring Products cannot guarantee a work result or accept any liability for whatever reason and/or legal relationship. In addition, the latest general terms and conditions of RCR Flooring Products Italia S.r.l. or RCR Flooring Products GmbH apply, which can be requested from us or viewed and printed out at www.rinol.it. We expressly reserve the right to make changes to the product specifications.

CE labelling:

DIN EN 13813 "Screed mortars, screed compounds and screeds - Properties and requirements" (Jan. 2003) specifies requirements for screed mortars used for indoor floor constructions.

Synthetic resin coatings and sealers are also covered by this standard. Products that comply with the above standard must be labelled with the CE mark.

RINOLEP-C531 EW

VAPOUR-PERMEABLE SELF-LEVELLING PIGMENTED COATING

RINOL

 RCR Flooring Products Italia S.r.l. 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 indoor use in buildings (structures according to technical data sheets)	
Fire behaviour:	BFL-S1
Water permeability:	NPD ²
Wear resistance (Abrasion Resistance):	NPD ²
Tensile bond strength (Bond):	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

Floor systems that are subject to mechanical stresses and whose products comply with DIN EN 1504-2 must also fulfil the requirements of DIN EN 13813. DIN EN 1504-2 "Products and systems for the protection and repair of concrete structures - Part 2: Surface protection systems for concrete" specifies the requirements for the surface protection methods "hydrophobic impregnation", "impregnation" and "coating". If required, the corresponding data sheet can be requested.

EU Regulation 2004/42 (Decopaint Directive):

The maximum VOC content permitted in EU Regulation 2004/42 (product category IIA / j type d) when ready for use is 500g/l (limit 2010). The maximum content of RINOL EP-C531-EW in ready-to-use condition is <500g/l VOC.

GIS Code: WGK RE 30

Further information on the GIS code is available from Wingis online at <https://www.wingisonline.de>