

# RINOL<sup>EP-C529</sup>

## CHEMICAL RESISTANT SELF-LEVELLING COATING



### 1 General data

#### Product description / Application

RINOL EP-C529 is a pigmented, ready-to-use, solvent-free 2-component coating based on high-quality epoxy resin with very high mechanical and chemical resistance (see list of chemical resistance). RINOL EP-C529 is very low in emissions.

After mixing with the appropriate hardener, RINOL EP-C529 is used to produce tough, hard coating systems that are easy to clean and have very good resistance to organic and inorganic acids, alkalis, mineral oils, petrol and solvents.

RINOL EP-C529 is used as a coating for reinforced concrete, concrete, plaster and screed surfaces in production and storage areas, and for HBV systems in accordance with § 63 WHG (Water Resources Act), without crack bridging.

### 2 Laying instructions

#### Substrate preparation

The substrate must be sufficiently load-bearing. The average pull-off strength of the surface to be primed must be at least 1.5 N/mm<sup>2</sup> and the compressive strength at least 25 N/mm<sup>2</sup>. Compatibility with the old coating must be checked by the applicator. The preparation of test areas is recommended. The substrate must be clean and free of separating agents.

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

Before applying RINOL EP-C529, the substrate must be primed with RINOL EP-P202, RINOL EP-P201, RINOL EP-P206 or RINOL EP-P210 in accordance with the relevant product data sheets. RINOL EP-C529 must be applied directly onto the primer or onto an EP levelling coat, depending on the required surface regularity.

If the surface is very rough or uneven, it must be levelled or scratch-coated with RINOL EP-P202, RINOL EP-P201 or RINOL EP-P206 before coating (see the relevant product data sheets).

The top coat RINOL EP-C529 must be applied no later than 24 hours after the previously applied coat (at 20°C), unless the previous coat has been broadcast with quartz sand. The substrate must be film-forming and non-porous; otherwise, bubbles and/or pores may form due to rising air from the substrate.

Care must be taken to ensure that no substances containing silicone or other reaction-interfering substances come into contact with RINOL EP-C529 before or during the curing phase.

#### Processing

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

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

The A-component must be stirred for 2–3 minutes. The B-component must then be completely emptied into the A-component. Both components must be mixed homogeneously for at least 2–3 minutes using a suitable electric mixer. Air entrapment during mixing must be avoided. The mixture should



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Materials



| Technical data       |                                           |                                                                                                   |
|----------------------|-------------------------------------------|---------------------------------------------------------------------------------------------------|
| Liquid mixture (A+B) |                                           |                                                                                                   |
| 1                    | Container size<br>(2-component container) | 25 kg container                                                                                   |
| 2                    | Colours                                   | RINOL colour chart, others on request                                                             |
| 3                    | Shelf life / storage                      | 12 months at 5-20°C, in any case (also during transport) frost-free, protect from direct sunlight |

| Technical data       |                                                   |                                                                                         |
|----------------------|---------------------------------------------------|-----------------------------------------------------------------------------------------|
| Liquid mixture (A+B) |                                                   |                                                                                         |
| 1                    | Density (23°C)                                    | approx. 1.39 g/cm <sup>3</sup>                                                          |
| 2                    | Processing time (23°C)                            | approx. 20 - 25 minutes                                                                 |
| 3                    | Processing / material and room temperature        | 12-25°C (min. 3 degrees above dew point also during installation and curing)            |
| 4                    | Material consumption<br>self levelling<br>sealing | approx. 1600 g/m <sup>2</sup> - 2500 g/m <sup>2</sup><br>approx. 250-300 m <sup>2</sup> |
| 5                    | Walkability (23°C)                                | after approx. 16 hours                                                                  |
| 6                    | Subsequent coating (23°C)                         | within 12-24 hours                                                                      |
| 7                    | Rel. humidity                                     | < 80% during the entire laying and curing phase                                         |

| Technical data |                                                                    |                               |
|----------------|--------------------------------------------------------------------|-------------------------------|
| Cured material |                                                                    |                               |
| 1              | Adhesive peel strength<br>(DIN ISO 4624)                           | approx. 1,5 N/mm <sup>2</sup> |
| 2              | Abrasion resistance<br>(DIN 53754 / ASTM D 1044)                   | 65 mg/1.000 cycles            |
| 3              | Full load-bearing capacity<br>mechanical (23°C)<br>chemical (23°C) | after 7 days<br>after 28 days |

then be decanted and stirred briefly again.

#### Self levelling

For a 1 mm levelling coat (at 23°C), we recommend applying the material unfilled onto the hardened primer. For a levelling coat thickness of 1–2 mm (at 23°C), the material may be filled with a maximum of 30% quartz sand (e.g. Geba Sand; other quartz sands may have a negative effect on deaeration, levelling, etc.).

RINOL EP-C529 must be poured onto the surface to be coated and applied with a suitable notched trowel. The liquid coating must be deaerated with a spiked roller. Spiked shoes must be worn in order to walk on the wet coating.



RCR Flooring Products Italia S.r.l.

Via V. Chiarugi 76/U  
I - 45100 Rovigo

Tel.: +39 (0) 425 411 200  
Fax: +39 (0) 425 411 222

info.italy@rcrif.com  
www.rinol.com

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ISO 45001

### Sealing

Primer: RINOL EP primer 0.30 - 0.5 kg/m<sup>2</sup>

Sealer: RINOL EP-C529 (1/2 coats) 0.25 - 0.3 kg/m<sup>2</sup>

The primer must form a continuous, dense and closed resin film. To optimise hiding power on rough surfaces, RINOL EP-C529 can be thixotroped with up to 0.5% RINOL X965 levelling agent.

For light colours (e.g. yellow, orange), 2 coats are recommended to achieve good hiding power.

Unevenness of the substrate and dirt ingress cannot be concealed by thin sealers.

The material must be spread with a rubber squeegee and then rolled evenly with a short-pile roller in a cross pass.

Suitability tests must be carried out on site by the applicator.

### Recoating

When recoating within 24 hours after installation, the top layer does not need to be sanded. If the interval between individual work steps exceeds 24 hours, 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 thoroughly, sanded thoroughly and vacuumed.

### Maintenance

To maintain the properties of the synthetic resin floor covering in the long term, regular maintenance is recommended. Please request a copy of the RINOL care instructions.

### Colour shade

Almost all colour shades are possible. Slight colour deviations are unavoidable due to raw material variations. Permanent colour deviations may occur with light colour tones, e.g. in the yellow or orange range, due to filling with quartz sand. Epoxy resins are generally not permanently colour-stable and tend to yellow under UV exposure and weathering. Artificial UV light may also alter the colour and 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

The technical data for the Company's products and systems have 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](http://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.

### Important note

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

At low temperatures, chemical reactions generally proceed more slowly. This extends the recoating time and the time until the floor can be walked on. The higher viscosity of the products also increases material consumption.

At higher temperatures, chemical reactions proceed more quickly, reducing both the recoating time and the time until the floor can be walked on.

The material must always be protected from water during application. Furthermore, the material must be protected from direct contact with water for approximately 24 hours (at 20°C) after application. Within this period, exposure to water (e.g. dew or condensation) can lead to white discolouration (carbamate formation) on the surface or make the surface sticky in these areas. This may impair adhesion to subsequent coatings.

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

The system must always be protected against rear moisture influence and water pressure, even during use.

### Legal information:

Due to the different materials, substrates and deviating working conditions, no guarantee of a work result or liability can be assumed by RCR Flooring Products for any reason and / or legal relationship whatsoever. In addition, the latest general terms and conditions of RCR Flooring Products Italia S.r.l. apply, which can be requested from us or viewed and printed out at [www.rinol.com](http://www.rinol.com). 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-C529

## CHEMICAL RESISTANT SELF-LEVELLING COATING

# RINOL

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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br>RCR Flooring Products Italia S.r.l.<br>Via V. Chiarugi 76/U<br>I-45100 Rovigo |
| 05 <sup>1</sup><br>EN 13813 SR-B1,5-IR4                                                                                                                            |
| 1119-CPR-0833<br>09<br>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 <sup>2</sup> |
| Wear resistance (Abrasion Resistance):                                                                     | NPD <sup>2</sup> |
| Tensile bond strength (Bond):                                                                              | B 1,5            |
| Impact resistance                                                                                          | IR 4             |
| Impact sound insulation:                                                                                   | NPD <sup>2</sup> |
| Sound absorption:                                                                                          | NPD <sup>2</sup> |
| Chemical resistance:                                                                                       | NPD <sup>2</sup> |

-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 sb) is 500g/l when ready for use (limit 2010). The maximum content of Rinol EP-C529, ready for use 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>