

1 General data

Product description / Application

RINOL EP-C526AS is a conductive, pigmented, ready-to-use, solvent-free, 2-component coating made of high-quality epoxy resin with very good chemical resistance, which can be used indoors and outdoors. The LEED v4 certified RINOL EP-C526AS is very low in emissions.

After mixing with the corresponding hardener, RINOL EP-C526AS is used in combination with the RINOL EP-E481 conductive layer to produce tough, electrically conductive 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-C526AS is used as a coating for reinforced concrete, concrete, plaster and screed surfaces in production and storage rooms for water-polluting liquids in accordance with § 63 WHG (Water Resources Act), as well as for paint shops, hospitals and gas transfer stations in the RINOL system RINOL^{WHG}. RINOL EP-C526AS can be driven on with pneumatic tyres, solid rubber, polyamide and Vulkollan wheels.

Crack bridging:

- Structure 2a) and 2b) up to 0.4mm with abZ
- Structure 2b) up to 0.5mm crack bridging with separate test report without abZ)

2 Laying instructions

Substrate preparation

The substrate must be sufficiently load-bearing. 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, non-slip, dry, firm and free of separating agents and protected from the effects of moisture on the back.

RINOL EP-C526AS is applied on top of the conductive layer RINOL EP-E481. The conductive topcoat RINOL EP-C526AS must be applied after 12-24 hours on the previously applied layer.

Make sure that no silicone-containing or other reaction-interfering substances come into contact with RINOL EP-C526AS before and during the curing phase.

Application

The product is supplied in 2-component containers in co-ordinated quantities. Before processing, the material must always be warmed up 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. Avoid stirring in air. The mixture should be decanted and then stirred again briefly.



Technical data

Liquid mixture (A+B)

1	Container size (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. 1.40 g/cm ³
2	Processing / material and room temperature:	approx. 20 - 25 minutes
3	Processing / material and room temperature	12-30°C (min. 3 degrees above the dew point even during laying and curing)
4	Material consumption (see processing page 2)	approx. 1700-2500 g/m ²
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 (DIN ISO 4624)	approx. 1,5 N/mm ²
2	Wear resistance according to BCA	Class AR 0,5
3	Shore D hardness (DIN EN 53505/ EN ISO 868)	approx. 72 - 78
4	Leakage resistance according to TRGS	< 10 ⁶ Ω
5	Earth leakage resistance (DIN EN 1081)	R _E < 10 ⁶ Ω
6	Full load capacity mechanical (20°C) chemical (20°C)	after 7 days after 28 days

Application RINOL^{WHG} System 2a) horizontal (layer thickness approx. 2.5 mm)

Primer: RINOL EP-P204 is applied with a rubber squeegee until the pores are closed and then rolled on with a suitable roller. Avoid the formation of puddles. The primer is sprinkled in a defined manner with quartz sand 0.3-0.8 mm.

RINOL EP-P204	Consumption approx. 300 - 500g/m ²
Quartz sand 0.3 - 0.8mm	Consumption approx. 500 - 800g/m ²

Conductive layer:

RINOL EP-E481 is applied with a rubber squeegee and rolled on with a roller. The entire substrate must be covered, otherwise there may be problems with conductivity.

RINOL EP-E481	Consumption approx. 100 - 150g/m ²
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Top coat:

RINOL EP-C526AS is applied with a notched trowel or notched squeegee and deaerated with a spiked roller.

RINOL EP-C526AS	Consumption approx. 2,500g/m ²
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Note:

For vertical or sloping surfaces, the addition of RINOL levelling agent is recommended. The quantities to be added are between 2-4%. (The amount added depends on the temperature).

Optionally, a scratch coat with RINOL EP-P204 according to abZ can also be used for system 2a).

Application RINOL^{WHG} System 2b) horizontal (layer thickness approx. 2.5 mm)

Priming scratch coat:

RINOL EP-P204 is mixed with quartz sand 0.1-0.3mm in a ratio of 1 : 0.5 and applied directly to the prepared substrate with a smoothing trowel or notched trowel and deaerated with a spiked roller.

RINOL EP-P204 + quartz sand 0.1-0.3mm	
Total mixture	Consumption approx. 800g/m ²

Conductive layer:

RINOL EP-E481 is applied with a rubber squeegee and rolled on with a roller. The entire substrate must be covered, otherwise there may be problems with conductivity.

RINOL EP-E481	Consumption approx. . 100 - 150g/m ²
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Top coat:

RINOL EP-C526AS is applied with a notched trowel or notched squeegee and deaerated with a spiked roller.

RINOL EP-C526AS	Consumption approx. . 1700-2500 g/m ²
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Note:

For vertical or sloping surfaces, the addition of RINOL levelling agent is recommended. The quantities to be added are between 2-4%. (The amount added depends on the temperature).

Maintenance

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

We would like to point out that the conductivity of conductive coating systems can be impaired by the application of care substances.

Colour shade

Slight differences in colour due to different production approaches and raw material

and fluctuations in raw materials are unavoidable. For coating work this must be taken into account. Demarcated surface sections must be carried out with the same production batch (see batch no. on the delivery container). Due to the addition of conductive particles to achieve conductivity, exact adjustment of the colour shade is not possible. In addition, colour deviations may occur with light shades, e.g. yellow or orange, due to the addition of quartz sand. Own tests are essential. Under UV and weathering influences, epoxy resins are generally not permanently colour-stable or tend to yellow. Artificial UV light can also change the colour tone 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.

Once the carbon fibre-filled top layer has hardened, individual carbon fibre threads may stand up in the hardened surface. This does not affect the functionality in any way..

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 discolouration (carbamate formation) on the surface or the surface is sticky in these areas 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 on the back and from 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 whatever reason and / or legal relationship. 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.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.



RCR Flooring Products Italia S.r.l.

Via Chiarugi 76/U

I-45100 Rovigo

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EN 13813 SR-B1,5-IR4

1119-CPR-0833

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EN 1504-2

Synthetic resin screed/coating for indoor use in buildings (structures according to technical data sheets)

Fire behaviour: E

Water permeability: NPD²

Wear resistance (Abrasion Resistance): NPD²

Tensile bond strength (Bond): B 1,5

Impact resistance IR 4

Impact sound insulation: NPD²

Sound absorption: NPD²

Chemical resistance: NPD²

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

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

LEED v4 certified

CE marking: 1504-2

Flooring systems that are subject to mechanical stresses and whose products comply with DIN EN 1504-2 must also comply with 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-C526AS, 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>