RINOL *EP-C531AS*

WATER-BASED CONDUCTIVE TWO-COMPONENT EPOXY COATING

1. General information

Product description / Application

RINOL EP-C531AS is a two-component conductive coating based on epoxy resin, colored or neutral, in aqueous solution, solvent-free, and ready to use. RINOL EP-C531AS is intended for flooring finishes on substrates that are damp or slightly counter-pressured. The resulting coating is durable and easy to clean. Thanks to its special formulation, RINOL EP-C531AS is permeable to water vapor but impermeable to water.

2. Installation instructions

Substrate preparation

The substrate must have an adhesive strength of at least 1.5 N/mm^2. Furthermore, it must be free of oil, grease, release agents, etc., as these could compromise the adhesion of the applied materials. Properly eliminate any cracks or cavities in the substrate, as they could cause porosity and bubbles on the surface of the coating. Check compatibility with existing coatings: we recommend performing a preliminary application test. RINOL EP-C531AS is applied on top of the conductive primer RINOL EP-E480.

Any unevenness in the substrate must be remedied beforehand by applying a RINOL epoxy leveling compound or by pre-leveling with RINOL EP-C531EW.

Take care not to allow the uncured product to come into contact with materials containing silicone or other substances that may interfere with the reaction.

Mixing

The product is supplied in a three-component package with pre-measured quantities.
Before processing, the material must be heated to at least room temperature (temperature of the room and the substrate). Mix the entire contents of each package.
After thoroughly homogenizing Component A for about 30 seconds, add Component B and mix with a low-speed electric mixer (double-helix mixer recommended) for about another 30 seconds to 1 minute. Slowly add Component C while stirring continuously and continue mixing for another 1–2 minutes.
The product can then be diluted with clean water up to a maximum of 10% by weight.

Self-leveling coating:

RINOL EP-C531AS is applied in portions to the surface using a Polyplan No. 48 notched trowel, in the appropriate thickness, using a bubble-breaking roller if necessary to remove any air trapped during the mixing of the various components. To ensure uniform thickness, the integrity of the teeth must be checked periodically. The applicator must wear spiked shoes in order to walk on the product before it has hardened.

Safety measures

For further information on the safe use of the product, please refer to the latest version of the Safety Data Sheet and the chemical industry guidelines for the use of application products (M004/M023). Wear protective clothing and safety goggles during processing.

Skin contact with liquid resins can cause health problems and allergies.

Technical data		
Liquid mixture (A+B)		
1	Liquid mixture (A+B)	approximately 1.7g/cm^3
2	Packaging (3 components)	25 kg
3	Durability / storage	6 months at 5–20°C, keep away from frost (including during transport) and protect from direct sunlight.
4	Colors	See RINOL color chart

Technical data		
Hardened material		
1	's adhesion strength (DIN ISO 4624)	> 1.5 N/mm^2
2	Compressive strength (DIN EN 196 / ASTM C109)	45 N/mm^2
3	Flexural strength (DIN EN 196 / ASTM C109)	30 N/mm^2
4	Shore D hardness (DIN 53505 / ASTM D 2240)	65
5	Electrical resistivity (DIN EN 1081)	< 1 × 10^6 Ω

Technical data		
Hardened material		
1	Workability time (68°F)	about 25-30 minutes
2	Application temperature/material and ambient temperature	12–25°C (at least 3 degrees above the dew point even during application and curing)
3	Material consumption not loaded	2–2,5 kg/m^2/mm
4	Relative humidity	< 70% during installation and hardening phase
5	Walkability (20 °C)	after about 24 hours
6	Next hand (20°C)	within 12 to 24 hours
7	Mechanical strength (20°C)	After 7 days
8	Chemical resistance (20°C)	After 28 days

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To learn about the possible system compositions and to obtain more detailed information about the application of RINOL products, please consult the RINOL Technical Guide.

Warnings

The technical data provided are indicative values measured by our laboratories and are not guaranteed. Therefore, the technical data sheet cannot give rise to civil liability claims.
In general, epoxy resins are not permanently color stable when exposed to ultraviolet light and atmospheric agents.
Furthermore, only the most recent version of the technical data sheet is valid, replacing all previous versions.

Important notes

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

In general, at low temperatures chemical reactions are slowed down and the viscosity of the product increases. Therefore, the workability and hardening times are extended.

Due to the increased viscosity of the products, material consumption may also increase.

At higher temperatures, chemical reactions are accelerated, consequently reducing workability and hardening times.
During processing, the material must be protected from exposure to water. In addition, after application, the material must be protected from contact with water for approximately 24 hours (at approximately 20°C). During this time, contact with water (e.g., dew or condensation) can cause the surface color to change to white (carbamate formation); this phenomenon can compromise the adhesion of subsequent layers.
Protect against moisture from the subsoil and rising damp even during use.

Legal notices

The information contained in this technical data sheet corresponds to our best knowledge and is based on laboratory tests and practical experience. However, due to the wide range of materials, substrates, site conditions, and application methods—all factors beyond our control—RCR Flooring Products Italia S.r.l. cannot assume any warranty or liability, express or implied, including that relating to the final result or adhesion, regardless of the legal basis.

This document does not constitute a legally binding guarantee of the specific properties of the product or its suitability for a particular purpose. We expressly reserve the right to make changes to this document at any time and without prior notice. At the time of use, only the latest version available is valid and applicable.

In the case of translated versions, discrepancies or errors may occur. If you have any doubts, misinterpretations, or uncertainties, please contact RCR Flooring Products Italia S.r.l. for clarification.

CE marking:

The DIN EN 13813 standard "Materials for screeds: properties and requirements" (January 2003) defines the requirements for screed mortars used in the construction of interior flooring. This standard also covers resin coatings and sealants. Products that comply with the above standard must bear the CE marking.

CE

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05[1]
EN 13813 SR-B1.5-IR4

1119-CPR-0833
09
EN 1504-2

Resin screed/coating for indoor use in buildings (in accordance with the technical data sheets)	
Reaction to fire	B_{fl-s1}
Permeability	NPD [2]
Abrasion Resistance	NPD [2]
Adhesion force (Bond)	1.5
Impact Resistance	IR 4
Sound insulation against impact noise	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 mark: 1504-2

Flooring systems subjected to mechanical stresses and whose products comply with DIN EN 1504-2 must also meet the requirements of DIN EN 13813.
The DIN EN 1504-2 standard "Products and systems for the protection and repair of concrete structures – Part 2: Concrete surface protection systems" defines the requirements for surface protection systems using "hydrophobic impregnation." If necessary, request the relevant instruction sheet.

Directive 2004/42 (Decopaint Directive):

The maximum VOC (volatile organic compound) content permitted by EU Directive 2004/42 (product category IIA/j, type sb) is 500 g/l in ready-to-use condition (2010 limit). The maximum content of RINOL EP-C531AS in ready-to-use condition is < 500 g/l VOC.

GISCODE: RE1

You can find more information about Giscode online at Wingis, at https://www.wingisonline.de/.

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