

RINOL **EP-S643**

Our products are "total solid" in accordance with the test method of Deutsche Bauchemie e.v.

1 General Information

Product Description and Use

RINOL EP-S643 is a coloured, ready-to-use, 2-component coating compound made from high-quality solvent-free epoxy resin. After mixing with the appropriate hardener, RINOL EP-S643 is used to produce pore-free, joint-free flooring coatings having a characteristic orange-peel structure which can be easily cleaned and exhibit a good level of resistance to fuels and lubricants as well as most solvents and many chemicals. RINOL EP-S643 is used as a roller coating on previously primed substrates or as a sealant for RINOL broadcast coatings in one or more applications.

2 Laying Instructions

Substrate Preparation

The substrate must be clean and free from release agents. Depending on the desired evenness, RINOL EP-S643 is applied directly onto the primer or onto an EP levelling layer (RINOL EP-L300). The coating RINOL EP-S643 must be laid no later than 24 h after the previously applied layer.

Care should be taken to ensure that no silicone-containing or other materials which could interfere with the reaction come into contact with RINOL EP S643 both before and during the curing phase.

Processing

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

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

The A-component must be stirred for at least 1-2 minutes. Then the entire contents of the B-component are emptied into the A-component. Both components must be mixed for at least 2-3 minutes using a suitable electric stirring tool. The inclusion of air in the stirring process must be avoided. The mixture should be poured into a different container and then stirred again briefly.

RINOL EP-S643 is poured, in portions, onto the surface to be coated and applied over the entire area using a spatula or trowel, but as thinly as possible. The surface is then rerolled using a structured roller in order to achieve the typical orange-peel structure. The fabricator must wear shoes with a spiked sole in order to walk on the wet coating.

Technical Data

Liquid mixture (A+B)

1. Density (20°C)	approx. 1.3 g/cm ³
2. Packaging unit size (2-component container)	25 kg
3. Colours	see RINOL Colour chart, others on request
4. Shelf life/storage	6 months at 5-20°C, store above freezing and out of direct sunlight (even during transport)

Technical Data

Cured material

1. Adhesive pull strength (DIN ISO 4624)	> 1.5 N/mm ²
2. Bending tensile strength (DIN EN 196)	41
3. Compressive strength (DIN EN 196)	78
4. Abrasion resistance (DIN 53754 / ASTM D 1044)	84 mg/1000 cycles
5. Shore-D hardness (DIN 53505 / ASTM D 2240)	81
6. Light-fastness (DIN EN ISO 105-B02)	7 (Scale 1-8, 8 = very good)

Technical Data

Liquid mixture (A+B)

1. Processing time (20°C)	approx. 30 - 35 minutes
2. Processing/material/room temperature	15-25°C (min. 3 degrees above the dew point, even during laying and curing)
3. Material consumption (depending on substrate)	approx. 500-700 g/m ²
4. Can be walked on (20°C)	after approx. 18 hours
5. Subsequent layer (20°C)	within 24 hrs
6. Full load-bearing capacity mechanical (20°C) chemical (20°C)	after 7 days after 28 days
7. Rel. humidity	< 80% (during the entire laying and curing phase)

Manufacturer:

RINOL Italia Research & Technology Srl, via V. Chiarugi 76/U, I-45100 Rovigo Tel. +39-0425-411200 Fax +39-0425-411222

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Maintenance

In order to preserve the properties of the synthetic resin floor covering in the long term, we recommend regular maintenance. Please ask for a copy of our RINOL maintenance guide for further information.

Safety Measures

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

Skin contact with liquid resins can be harmful to health and may lead to allergies.

Possibilities for layering and detailed information regarding the application of RINOL products can be found in the RINOL Technical Guide.

Colour

Slight variations in colour are unavoidable owing to the raw materials. Due to the addition of carbon fibres in order to achieve conductivity, it is not possible to set the colour precisely. In addition, light colours (yellow, orange, etc.) may exhibit a limited coverage capacity. In this case it may be necessary to carry out a number of applications in order to achieve the desired coverage. Epoxy resins are not generally colour-stable in the long term under the effects of UV and weathering and tend to turn yellow. Artificial UV light can also modify the colour and could also lead to yellowing. The technical properties remain.

Note

The specification values given are approximate values ascertained by us and do not constitute guaranteed properties. Consequently, no liability claims may be derived from the product data sheet.

Please also note that only the most recent version of the technical data sheet is valid and replaces all previous data sheets.

Important Note

In addition to ambient temperature, floor temperature is of key importance.

As a basic principle the chemical reactions are delayed at low temperatures. The reworking time and the time until the floor can be walked on are thus extended.

Higher viscosities of the products also cause an increase in material consumption.

At higher temperatures the chemical reactions are shortened and the reworking time and the time until the floor can be walked on are reduced.

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

As a basic principle, protect against the infiltrating action of moisture from the rear face, including during use.

Legal note:

Owing to the different materials, substrates and differing working conditions, no guarantee in terms of result or adhesion for whatever reason and/or legal nature can be assumed by RINOL.

For the rest, the most recent general terms of business of RINOL Italia Research & Technology and RINOL GmbH apply and can be requested from us or viewed, in their most recent version, at www.rinol.com and printed out. We reserve the right to make changes to the product specifications.

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CE Marking:

DIN EN 13813 "screed mortars, screed materials and screeds - properties and requirements" (Jan. 2003) specifies requirements of screed mortars which are used for floor constructions in interior spaces. This standard also covers synthetic resin coatings and sealants. Products which conform to the above-mentioned standard are provided with the CE marking.

 RINOL Italia Research & Technology Srl 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 internal use in buildings (superstructures in accordance with techn. data sheets)	
Reaction to fire	B _{FL-S} 1
Water permeability	NPD ²
Abrasion resistance	NPD ²
Bond	B 1.5
Impact resistance	IR 4
Impact sound insulation	NPD ²
Noise absorption:	NPD ²
Chemical resistance	NPD ²

-1) the last two numbers of the year in which the CE marking was applied

-2) NPD = no performance determined;

CE marking: 1504-2

Flooring systems which are subjected to mechanical stresses and products thereof which comply with DIN EN 1504-2 must also 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 "hydrophobing impregnation", impregnation and coating. The relevant data sheet can be requested as necessary.

European Regulation 2004/42 (Decopaint Directive)

The maximum content of VOC (product category IIA/ j type sb) as permitted by European Regulation 2004/42 is 500g/l (limit 2010) in the ready-to-use state. The maximum content of RINOL EP S643 in the ready-to-use state is < 500 g/l VOC.

GIS Code: WGK RE 1

Further information regarding the GIS code can be obtained from Wingis online at <http://www.wingis-online.de/wingisonline>

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