RINOL*EP-S680 ESD*

VAPOR-PERMEABLE PIGMENTED DISSIPATIVE COATING

1 General data

Product description / Application

RINOL EP-S680 ESD is a ready-to-use, 2-component, colored, electrically dissipative coating compound in aqueous dispersion, based on epoxy resin. RINOL EP-S680 ESD is used to produce dissipative, resistant, non-porous, continuous and water-vapor-permeable coatings. The coatings are easy to clean and have good resistance to fuels and lubricants, most solvents and many chemicals.

After mixing with the appropriate hardener, RINOL EP-S680 ESD is used as a roller-applied coating on masonry, cement, anhydrite and magnesite substrates, with or without primer. RINOL EP-S680 ESD can also be used for coating walls and ceilings.

2 Installation instructions

Substrate preparation

The substrate must be clean and free from oily, greasy or release-agent-containing contaminants, loose particles and similar substances. Cracks and cavities must be properly repaired in advance. Before coating, the substrate must be thoroughly sanded and then carefully vacuumed.

Magnesite floors must be pretreated with a citric acid solution and then thoroughly washed with plenty of water. The substrate must be dry before sealing.

Care must be taken to ensure that no silicone-containing substances or other substances that may interfere with the reaction come into contact with RINOL EP-S680 ESD before and during the curing phase.

Application

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).

Component A must be stirred for at least 1–2 minutes. Component B must then be emptied completely into component A. Both components must be mixed for at least 2–3 minutes using a suitable electric mixer. Air entrainment must be avoided during mixing. The mixture must then be transferred to another container and briefly mixed again.

Depending on the application conditions and the absorbency of the substrate, the primer can be diluted with up to 20% water. When used as a sealer, RINOL EP-S680 ESD is diluted with 10–20% water.

RINOL EP-S680 ESD must be poured in portions onto the surface to be coated and applied uniformly over the entire surface using a lambskin roller. The formation of puddles must be avoided.
Relative humidity during application and curing must not exceed 75% in order to ensure sufficiently rapid evaporation of the water.

Subsequent coating

Due to the special conductive nature of the product, the coating has a high degree of surface mattness. To preserve its aesthetic appearance over time, it is recommended to adopt a regular cleaning and maintenance program, using detergents and procedures appropriate to the type of coating. Refer to the RINOL maintenance guides.

Technical data		
Liquid mixture (A+B)		
1	Container size (2-component container)	25 kg container
2	Colors	RINOL color chart, others on request
3	Shelf life / storage	6 months at 5 - 20°C, in all cases (including during transport) protected from frost, protect from direct sunlight

Technical data		
Liquid mixture (A+B)		
1	Density (20°C)	approx. 1.31 g/cm^3
2	Working time (20°C)	approx. 35 minutes
3	Processing / material and ambient temperature	15–25°C (min. 3 degrees above the dew point also during installation and curing)
4	Material consumption (depending on the substrate)	approx. 200 - 400 g/m^2/layer
5	Walkability (20°C)	after approx. 22 hours
6	Subsequent coating (20°C)	within 24 - 48 hours
7	Relative humidity	< 70% during the entire installation and curing phase

Technical data		
Cured material		
1	Pull-off adhesion strength (DIN ISO 4624)	1.5 N/mm^2
2	Abrasion resistance (DIN 53754 / ASTM D 1044)	97 mg / 1,000 cycles
3	Ground resistance Rg (DIN EN 61340-4-1)	< 1x10^9 Ω
4	Light resistance (DIN EN ISO 105-B02)	6 (scale 1-8, 8=very good)
5	Full resistance mechanical (20°C) chemical (20°C)	after 7 days after 28 days

Maintenance

To maintain the properties of the synthetic resin flooring over the long term, regular maintenance is recommended. Refer to the RINOL maintenance instructions.

Color shades

Almost all color shades are possible. Slight color deviations are unavoidable

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due to the raw materials. Permanent color deviations may occur with light shades, for example in the yellow or orange range, due to the use of quartz sand filler.

Epoxy resins in general are not permanently color-stable over the long term and may yellow under the effect of UV rays and weathering. Artificial UV light can also alter the color and cause yellowing. The technical properties remain unchanged.

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

Skin contact with liquid resins may cause 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 regarding the use of these products are provided without guarantee, since the conditions under which they are used are beyond the Company's control. It is the customer's responsibility to determine whether the products are suitable for the particular application and whether the conditions of use are appropriate for the particular product. Therefore, no liability can arise from the product data sheet.

Please note that only the latest version of the data sheet is valid and that it replaces all previous versions. The technical data provided are approximate values determined by us and do not constitute a guarantee of properties. Subject to misprints, errors, translation errors and modifications. Please note that the information contained in the system data sheets may differ in different languages/countries. For further information, please visit our website at www.rinol.com.

EP resins in general are not color-stable over the long term under the influence of UV rays and weathering. Surfaces subjected to chemical and mechanical stress are subject to wear due to use. Regular maintenance is recommended. Consumption quantities, working time, walkability and achievement of load-bearing capacity depend on the temperature and the object.

The data sheet does not release the user from carrying out their own tests regarding applicability, if necessary and within the limits of their capabilities. For layer build-up options and more detailed information on installing RINOL products, refer to the RINOL Technical Guide.

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

At low temperatures, chemical reactions generally proceed more slowly. This extends the times for subsequent coating and walkability. The higher viscosity of the products also increases material consumption.

At higher temperatures, chemical reactions proceed more quickly, reducing the times for subsequent coating and walkability.

During application, the material must always be protected from water. In addition, 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 (for example, dew or condensation) may cause white discoloration (carbamate formation) on the surface or make the surface sticky in these areas. This may impair the adhesion of subsequent coatings.

Applications not expressly mentioned in this 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 the influence of moisture from the rear side and against water pressure, even during use.

Legal information:
Due to the different materials, substrates and varying working conditions, RCR Flooring Products cannot assume any guarantee for the result of the work or any liability, for any reason and/or legal relationship whatsoever. Furthermore, the latest general terms and conditions of RCR Flooring Products Italia S.r.l. apply; these can be requested from us or viewed and printed at www.rinol.com. We expressly reserve the right to make changes to the product specifications.

CE marking:
The standard DIN EN 13813 "Screeds and screed materials" - Screed materials and screeds - Properties and requirements" (Jan. 2003) specifies the requirements for screed materials used in internal floor constructions.

Synthetic resin coatings and sealers also fall under this standard. Products that comply with the above-mentioned standard must bear the CE mark.

CE
RCR Flooring Products Italia S.r.l. Via V. 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 (systems according to technical data sheets)	
Reaction to fire:	B_{FL}-s1
Water permeability:	NPD [2]
Wear resistance (abrasion resistance):	NPD [2]
Tensile adhesion strength:	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

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CE marking: 1504-2
Flooring systems subjected to mechanical stress and whose products comply with DIN EN 1504-2 must also meet 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 necessary, the relevant data sheet can be requested.

EU Regulation 2004/42 (Decopaint Directive):
The maximum VOC content permitted by EU Regulation 2004/42 (product category IIA / j type sb) is 500 g/l when ready to use (2010 limit). The maximum content of RINOL EP-S680 ESD under conditions of use is <500 g/l VOC.

GIS code: WGK RE 90
Further information on the GIS code is available online at Wingis at https://www.wingisonline.de/

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