<u>1 General data</u>

Product description / Application

RINOL EP-E481 is a conductive, water-emulsified, black, solvent-free, readyto-use 2-component coating compound made of high-quality epoxy resin. The LEED v4 certified conductive coating is very low in emissions.

After mixing with the corresponding hardener, RINOL EP-E481 is used as a conductive layer for RINOL coating systems WHG conductive with high electrostatic discharge capacity and good interlayer adhesion.

RINOL EP-E481 achieves a discharge resistance of < 100x10⁶ Ω (DIN EN 1081) in the WHG conductive system in combination with RINOL copper tape and the conductive top coat RINOL EP-C526AS.

RINOL systems:

RINOL EP-E481 is the conductive layer for the system:

RINOL WHG conductive

2 Installation instructions

Substrate preparation

RINOL EP-E481 is applied to a very even, non-sanded, non-porous levelling layer. The conductive layer should be installed no later than 24 hours after the previous layer. Later installation is only possible after careful sanding of the substrate. The substrate must be clean and free of separating agents.

It is essential to check whether the substrate is porous, porous or similar, as this can lead to the formation of bubbles or pores in the coating. This must be checked by the applicator and eliminated if necessary.

Copper strips are first bonded to the prepared substrate, which must be connected to the potential equalisation by an electrician. The tapes are covered with a gauze strip.

Care must be taken to ensure that no substances containing silicone or other substances that may interfere with the reaction come into contact with RINOL EP-E481 before and during the curing phase.

Application

The product is supplied in coordinated quantities in 2-component containers.

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

The A-component must be completely emptied into the previously thoroughly stirred B-component and homogenised with a mechanical agitator (300 rpm) for approx. 5 minutes. Avoid stirring in air. The mixture must be repotted and stirred again briefly.

RINOL EP-E481 is poured onto the surface to be coated and spread over the surface using a rubber squeegee. (Consumption approx. $100 - 150 \text{ g/m}^2$ depending on the roughness of the substrate). The surface is then rolled evenly with a roller.

Recoating

The subsequent coating must be applied at 20°C within 24 hours, whereby the RINOL EP-E481 conductive layer must not be sanded.



Technical data				
Liquid mixture (A+B)				
1	Container size (2-component container)	18 kg container		
2	Colour	black		
3	Shelf life / storage	6 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 (20°C)	approx. 1.06 g/cm ³	
2	Working time (20°C)	approx. 20 - 25 minutes	
3	Processing / substrate tempera- ture	15-25°C (min. 3 degrees above the dew point even during installation and curing)	
4	Material consumption	approx. 100-120 g/m ²	
5	Walkability (23°C)	after approx. 12 hours	
6	Subsequent coating (23°C)	within 12 - 24 hours	
7	"Leakage resistance (DIN EN 1081)"	$\leq 2 \times 10^4 \Omega$	
8	Rel. humidity	$\rm < 75\%$ during the entire laying and curing phase	

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 languag-



Via Chiarugi 76/U I - 45100 Rovigo



es / countries may differ. Further information is available on our website at www.rinol.com

Please refer to the RINOL Technical Guide for layer structure options and more detailed information on the installation of RINOL products.

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 the subsequent coats.

The adhesion of the individual layers to each other can be severely impaired by the effects of moisture and contamination between the individual coats.

Always protect against the effects of moisture on the back and pressure, even during use.

Legal information:

Due to the different materials, substrates and deviating working conditions, RCR Flooring Products cannot guarantee a work result or accept any liability 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.

CE		
RCR Flooring Products Italia S.r.I.		
Via Chiarugi 76/U		
I-45100 Rovigo		
051		
EN 13813 SR-B1,5-IR4		
1119-CPR-0833		
09		
EN 1504-2		

Synthetic resin screed/coating for indoor use in buildings (structures according to technical data sheets)		
Fire behaviour:	E	
Water permeability:	NPD ²	
Wear resistance (Abrasion Resistance):	NPD ²	
Tensile bond strength (Bond):	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

LEED v4 certified

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 content of VOC (group Wb: j) permitted in the EU regulation 2004/42 is 140g/l (level 1 - limit 2007) 140g/l (level 2 - limit 2010) when ready for use. The maximum content of RINOL EP-E481 when ready for use is <140g/l VOC.

GIS Code: WGK RE 30

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



Via Chiarugi 76/U I - 45100 Rovigo