

RINOLEP-T700

HIGH QUALITY TRANSPARENT BINDER

RINOL



1 General data

Product description / Application

RINOL EP-T700 is a solvent-free, high-quality, colourless 2-component epoxy resin binder for the production of coloured quartz, synthetic resin mortar coatings and primers on mineral substrates with a residual moisture content of up to 4.0 % in cementitious systems and up to 0.5 % in anhydrite-bound systems (measured using the CM measuring method).

RINOL EP-T700 has excellent mechanical properties and is also used for repair purposes. After mixing with the appropriate hardener in combination with RINOL coloured quartz mixtures, RINOL EP-T700 is used to produce RINOL mortar coverings for industrial floors with the highest mechanical requirements.

RINOL systems

RINOL EP-T700 is the binder for the RINOL system:

- RINOL **SOLID**

2 Laying instructions

Substrate preparation

Use as a primer

The substrate must be sufficiently stable. 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 bonding and adhesion of the epoxy resin to a mineral substrate is based on anchoring via the roughness depth and a good penetration capacity into the substrate. High-strength, vacuum-etched or extremely smoothed and very dense concrete surfaces require more intensive substrate preparation. It is essential to check whether the substrate is porous or similar, as in these cases two or more work steps are usually required to achieve optimum pore sealing. Pore sealing must always be ensured to prevent the formation of bubbles in the subsequent layers. In individual cases, a test surface must be created. This also applies to highly absorbent and/or porous substrates.

The substrate must be pre-treated by shot blasting. Coarse impurities can be removed by milling.

RINOL EP-T700 can be applied directly to the cementitious substrate at substrate moisture contents of up to max. 3.5% (measured using the CM measuring method). The substrate must have an adhesive tensile strength of at least 1.5 N/mm². It must also be free from oily, greasy or release agent-containing contaminants, loose particles, etc. Cracks and cavities must be properly removed beforehand.

Use as a binder for mortar coatings

If the floor has unevenness or holes, these should be removed beforehand with RINOL EP-T700 (filled with fire-dried quartz sand). The mortar layer with RINOL EP-T700 as a binder must be installed no later than 24 hours after the primer has been applied.

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-T700 before and during the curing phase.

Technical data		
Liquid mixture (A+B)		
1	Container size (2-component container)	25 kg container
2	Colour	colourless
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 binder (20°C) Density mortar	approx. 1,08 g/cm ³ approx. 2,00 g/cm ³
2	Processing time (20°C)	approx. 20 - 25 minutes
3	Processing / material and room temperature	15 - 25°C (min. 3 degrees above the dew point also during installation and curing)
4	Material consumption/working cycle Primer: Mortar / mm / layer thickness;	approx. 200 - 500 g/m ² approx. 2.000 g/m ²
5	Walkability (20°C)	after approx. 24 hours
6	Subsequent coating (20°C)	dans les 12 - 24 heures.
7	Rel. humidity	< 80% during the entire laying and curing phase

Technical data		
Cured material		
1	Adhesive peel strength (DIN ISO 4624)	> 1,5 N/mm ²
2	Compressive strength (DIN EN 196) - Mortar	approx. 78 N/mm ²
3	Flexural tensile strength (DIN EN 196) - Mortar	approx. 22,6 N/mm ²
4	Grinding wear (DIN 51963) - Mortar	6,2 cm ³ / 50 cm ²
5	Full load capacity mechanical (20°C) chemical (20°C)	after 7 days after 28 days

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MANAGEMENT SYSTEM
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Processing

Binder

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 B-component must be completely emptied into the A-component. Both components must be mixed homogeneously with a mechanical agitator for at least 1 - 2 minutes. Avoid stirring in air.

Primer

When using RINOL-EP-T700 as a primer, the mixture should be repped before use. The primer is then poured in portions onto the surface to be coated and spread with a notched trowel or rubber squeegee. The primer must be applied in a film-forming and non-porous manner. The primer should be sprinkled with RINOL quartz sand (approx. 1,000 g/m²).

Caution:

- When recoating with levelling coats, avoid excessive sanding.
- Do not sand at all when recoating with conductive coatings.

Synthetic resin mortar

The fillers (RINOL colourite quartz mixture RINOL SOLID or quartz sand mixture RINOL QS40) are premixed dry in the compulsory mixer. The mixed binder (see above) is then added and mixed with the filler for exactly 2 minutes (the mixing time must be adhered to exactly, as otherwise there will be colour differences between the individual mixtures).

The mixing ratio of binder/filler must be varied between 1:9 and 1:7 depending on the temperature. The synthetic resin mortar is applied to the primer (RINOL EP-P200 or RINOL EP-T700) in the conventional manner in a minimum layer thickness of 8 mm, levelled and smoothed.

After curing, the mortar layer must be levelled 2 - 3 times with RINOL EP-T710.

If RINOL EP-T700 is filled, the installer should create test areas on site to ensure the desired result. The technical data may vary depending on the degree of filling/filler.

Reworking

When reworking up to 24 hours after installation, the mortar layer does not need to be sanded. Subsequent reworking is only possible after careful sanding and extraction of the sanding dust.

With the RINOL SOLID coating system, the mortar layer must not be sanded. With synthetic resin mortar, work fresh on fresh or sprinkle the fresh primer with fire-dried quartz sand (e.g. 0.3 - 0.8 mm or 0.7 - 1.2 mm) depending on the thickness of the synthetic resin mortar.

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.

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 modifications 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 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. In addition, the material must be protected from direct contact with water for approximately 24 hours (at 20°C) after application. Within this time, exposure to water (e.g. also dew, condensation) can lead to white discoloration (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 any 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 - Characteristics 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
05 ¹ EN 13813 SR-B1,5-IR4
1119-CPR-0833 09 EN 1504-2

Synthetic resin screed/coating for interior use in buildings (structures according to technical data sheets)	
Fire behaviour:	BFL-S1
Water permeability:	NPD ²
Wear resistance (Abrasion Resistance):	NPD ²
Tensile bond 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

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 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-T700 in ready-to-use condition is <500g/l VOC.

GIS Code: RE 30

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