MAPEI

IN COMPLIANCE WITH EUROPEAN STANDARD
EN 1504-2 (C)
PRINCIPLES
PI-PR-CR
SURFACE PROTECTION SYSTEMS FOR CONCRETE

Rescryl TC 305

CE EN 13813

CE EN 1504-2

Two-component general purpose topcoat based on MMA

WHERE TO USE

Rescryl TC 305 can be used as a general-purpose topcoat for MMA coatings for floors used in warehouses, in industries, production areas or similar applications.

Rescryl TC 305 is used in systems **Rescryl TR** and **Rescryl BC**.

Rescryl TC 305 is normally applied on concrete and other cement- based substrates

TECHNICAL CHARACTERISTICS

Rescryl TC 305 is a multi-purpose topcoat.
Rescryl TC 305 has good wear resistance.
Rescryl TC 305 has excellent resistance to many chemicals.
Rescryl TC 305 is very reactive.
Rescryl TC 305 can be used for wet and dry production areas.

Rescryl TC 305 complies with the principles defined in EN 1504-9 standards *("Products and systems for protecting and repairing concrete structures. Definitions, requirements, quality control and conformity assessment. General principles for the use and application of systems")*, and the requirements of EN 1504-2 *("Protection systems for concrete surfaces")* for class: products for protecting surfaces - coating (C) – PI, PR and CR.
Rescryl TC 305 complies with EN 13813.

RECOMMENDATIONS

- Permanent water loading can result in a white discoloration of **Rescryl TC 305**. Always gather waste or flowing water (particularly hot water) into channels and convey it into a proper drainage system.
- **Rescryl TC 305** sshall be spread and rolled immediately to an even layer thickness of not more than 400 microns. If a thicker layer is required it must be applied in two separate coats.
- To avoid any possible formation of microbubbles in **Rescryl TC 305** it is important to work with freshly mixed material only.

APPLICATION PROCEDURE

Preparation of the substrate

The concrete must be sound, clean and dust-free with a smooth permanent surface. Completely remove all irregular or loose parts, cement laitance, dust, paint, oil, form-release compounds and any other undesired material from the surface of the substrate before applying the product. Normal cleaning methods such as milling, grinding or shot blasting can be used.

Preparation of the product

Prior to use **Rescryl TC 305** must be carefully stirred to achieve a uniform distribution of the paraffin contained in the product.

Mixing

Rescryl TC 305 is thoroughly mixed together with **Rescryl H2** H2 in accordance with the below guidelines.

It should be noted that the amount of **Rescryl H2** to be added depends upon the temperature:

- at +30°C add 0,6% by weight of **Rescryl TC 305**;
- at +20°C add 1% by weight of **Rescryl TC 305**;
- at +10°C add 1,5% by weight of **Rescryl TC 305**;
- at 0°C add 2% by weight of **Rescryl TC 305**.

Rescryl TC 305

Rescryl TC 305: is a two-component general-purpose topcoat based on MMA designed for substrate like concrete. The product complies with specification in EN 13813 and EN 1504-2 Coating (C) principles: PI, PR and CR

TECHNICAL DATA (typical values)

PRODUCT DETAILS	
Color:	transparent
Apperance:	thin liquid
Density (g/cm³) (ISO 2811):	1.00
Viscosity at + 25°C (mPa·s) (DIN 53018):	40-60
APPLICATION DATA	
Mixing ratio:	see application procedure
Pot life / Processing time at + 20°C:	approx. 10 min.
FINAL PROPERTIES	
Curing time at + 20°C:	approx. 30 min.

Performance characteristics for product or system	Test methods	Requirements according to EN 13813 for synthetic resin screeds	Product or system performance
Wear resistance:	EN 13892-4	< AR1	AR1
Bond strength:	EN 13892-8:2004	>2.0 N/mm²	>2.0 N/mm²
Impact resistance:	EN 6272-1	> IR 4	> IR4
Reaction to fire:	EN 13501-1	Declared value	E_{FL}

Performance characteristics for product or system	Test methods	Requirments accordning to EN 1504-2	Product or system performance
Abrasion resistance:	EN ISO 5470-1	< 3000 mg H22/1000 cycles/ load 1000 g	< 3000 mg
Permeability to CO_2:	EN 1062-6	Permability to CO_2 S_D > 50 m	S_D > 50 m
Water vapour permeability:	EN ISO 7783	Class I: S_D < 5 m, Class II: 5 m < S_D < 50 m, Class III: S_D > 50 m	Class III
Capillary absorption and permeability to water:	EN 1062-3	w < 0.1 kg/m²*h$^{0.5}$	w < 0.1 kg/m²*h$^{0.5}$
Resistance to severe chemical attack Class I: 3 days with no pressure Class II: 28 days with no pressure Class III: 28 days with pressure We recommend using test liquids for the 20 classes indicated in EN 13529, which covers all the most common chemical agents. Other test liquids may be agreed upon between those interested in the tests:	EN 13529	Reduction of hardness less than 50% when measured according to the Buchholz method, EN ISO 2815 or the Shore method (EN ISO 868), 24 hours after removing the coating material from immersion in the test liquid.	Class II – see separate lists.
Impact resistance:	EN 6272-1	Class I: ≥ 4 Nm, Class II: ≥ 10 Nm, Class III:≥ 20 Nm	Class I
Pull-off test Reference substrate: MC (0.40) as specified in EN 1766, curing time 7 days:	EN 1542	Average (N/mm2) Crack-bridging or flexible systems with no traffic: ≥ 0.8 (0.5) with traffic: ≥ 1.5 (1.0) Rigid systems with no traffic: ≥ 1.0 (0.7) with traffic: ≥ 2.0 (1.0)	>2.0 N/mm²
Reaction to fire:	EN 13501-1	Declared value	E_{FL}

Preformance determined for use in systems **Rescryl BC** or **TR**

- below 0°C add 3% by weight of **Rescryl TC 305**.
- below -10°C add 4% by weight of **Rescryl TC 305** and additionally add **Rescryl 404**, which is an accelerating agent.

Note: Weight to Volumetric conversion of **Rescryl H2**:
- 1 cm^3 of **Rescryl H2** weighs 0,64 g
- 1 g of **Rescryl H2** = 1,57 cm^3

Please contact Mapei Technical Service for further details.

Application of the product
System Rescryl TR
The concrete substrate should always be primed with **Rescryl P 101** or **Rescryl P 107**f before installation. The already prepared mix of **Rescryl M205** and **Rescryl H2** should be added **Mapequartz Color Akrylmix 7-8** in a ratio of 1:3.5 by weight – and then proper mixed until it is completely homogenous. Apply the mix in an even thickness of 4-5 mm by rake, and smooth the surface with an American trowel. Take special note take the mix does not separate – leaving areas with a surplus of binder on parts of the surface. This could cause to visual defects in the surface.

After curing of the product apply at least two layers of **Rescryl TC 305**. Pour the topcoat onto the floor in stripes (do not apply directly out of the mixing pails) and distributed onto the coating with a short-pile paint roller. On structured coatings the topcoat can be spread before rolling with a rubber squeegee.

System Rescryl BC
The concrete substrate should always be primed with **Rescryl P 101** or **Rescryl P 10**7. before installation. The already prepared mix of **Rescryl M205** and **Rescryl H2** should be added **Mapefloor SL HD** in a ratio of 1:2 by weight – and then proper mixed until it is completely homogenous. Apply the mix in an even thickness of 2-3 mm by rake, and scatter the surface immediately to excess with **Mapequartz Color 0.3-0.8 mm** or **Mapequartz Color 0.7-1.2 mm**.

After curing of the product apply at least two layers of **Rescryl TC 305**. Pour the topcoat onto the floor in stripes (do not apply directly out of the mixing pails) and distributed onto the coating with a short-pile paint roller. On structured coatings the topcoat can be spread before rolling with a rubber squeegee.

CLEANING
Tools and equipment must be washed immediately after use with **Acetone** or other cleaning agent suited for MMA. Once hardened the product may only be removed mechanically.

CONSUMPTION
Consumption is approximately 0.2 - 0.4 kg/m^2 per layer, depending on the temperature, the substrate's coarseness and absorption..

PACKAGING
20 kg cans.
180 kg drums.

Rescryl H2 is sold separately.

STORAGE
Properties for use are not changed for a period of 6 months if stored in a cool dry place in original packaging. The optimal storage temperature is +15°C and +20°C.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION
Instructions for the safe use of our products can be found on the latest version of the SDS available from our website www.mapei.no

PRODUCT FOR PROFESSIONAL USE.

NOTE
Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application: for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.no

All relevant references for the product are available upon request and from www.mapei.no

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