

## Technical Data Sheet

33.06.625E – 11/06

### ® KERAPLAN VE 211

#### Wear-resistant, trowel-applied Top Coat for vinyl ester resin coatings

##### Description

KERAPLAN VE 211 is a jointless trowel-applied Top Coat based on vinyl ester resin and containing mineral fillers. The layer thickness is approx. 3 mm.

##### Typical uses

KERAPLAN VE 211 is recommended for use as a finishing layer on vinyl ester resin coatings that have been applied to concrete and screed surfaces. Its primary spectrum of application is for floorings in chemical factories, galvanising plants, storage facilities for water-polluting liquids, workshop halls, workshops, loading and transshipment areas, as well as heavy traffic areas.

##### Advantages

KERAPLAN VE 211 is a Top Coat that is fit for traffic and highly resistant to mechanical loads. It also offers an excellent chemical resistance to acids, alkaline solutions and oxidising substances. The coating may be applied without joints and hardens with a minimum of shrinkage.

##### Chemical resistance

Information on the chemical resistance properties will be provided on request.

##### Substrate

All concrete structures must meet the requirements given in DIN EN 14879-1. KERAPLAN VE 211 is also applied on vinyl ester resin laminate coatings.

##### Surface pre-treatment

The surface of the vinyl ester resin coating on which the Top Coat will be applied must be free of all separating substances as well as any impurities. Provided that KERAPLAN VE 211 is applied within the recommended waiting period, no additional treatment is necessary. Coatings that have already been exposed to (environmental) stress conditions must undergo a mechanical pre-treatment, i.e. roughening by means of grinding or blasting.

##### Application

KERAPLAN VE 211 is composed of a four-component trowel-applied Top Coat and a two-component Sealing Layer.

Mixing ratios	Parts by weight (kg)	Parts by volume (l)
<u>Top Coat</u>		
KCH VE solution 21 RAL	100	2.00
KCH UP hardener 2	3	1 bag (60g)
KCH powder 51	250	3.80
KCH powder 5	290	4.10
<u>Sealing Layer</u>		
CEILCOTE VE Top Coat Resin RAL	100	2.00
CEILCOTE # 2C Hardener	2	0.04

Pour the Top Coat compound onto the substrate, distribute it evenly and smooth it with a smoothing tool. The thickness of the Top Coat should measure approx. 3 mm. Apply the Sealing Layer onto the hardened Top Coat.

##### Pot life

Temperature	Top Coat	Sealing Layer
15°C	~ 40 min.	~ 60 min.
20°C	~ 30 min.	~ 45 min.
30°C	~ 13 min.	~ 20 min.

##### Coverage

Top Coat: approx. 2.1 kg/m<sup>2</sup> per mm thickness  
Sealing Layer: approx. 0.4 kg/m<sup>2</sup>

##### Packing

The following standard quantities are available:

KCH VE solution 21 RAL	20 kg
CEILCOTE VE Top Coat Resin RAL	10 kg
CEILCOTE # 2 Hardener	0.4 kg
KCH UP hardener 2	bag 60 g
KCH powder 51	25 kg
KCH powder 5	25 kg

**Storage**

The products shall be stored in a cool and dry place. With a storage temperature of 23°C the minimum shelf life is as follows:

KCH VE solution 21 RAL	6 months
KCH VE solution 21 RAL < 15 °C	9 months
CEILCOTE VE Top Coat Resin RAL	3 months
CEILCOTE VE Top Coat Resin RAL <15°C	6 months
CEILCOTE # 2 Hardner	6 months
KCH UP hardener 2	6 months
KCH powder 51	24 months
KCH powder 5	24 months

Higher temperatures will shorten the shelf life of this products. The packaging drums are to be kept tightly shut and are to be resealed each time material has been removed. All liquid products must be stored frost-free.

**Safety**

Adequate ventilation is to be provided while work is in progress. Ventilation is compulsory for all work carried out in pits and closed rooms.

All vapours that are produced while work is in progress must be continuously suctioned off at floor or bottom level.

Only the amount of material effectively required to continue work is to be stored at the working place. The instructions for the prevention of fire and explosion are to be observed if required.

Please note and ensure that even the smallest quantities of the individual components and/or prepared mixtures are not allowed to reach the sewerage.

All regulations for the prevention of accidents stipulated by the employer's liability assurance association, the regulations for the prevention of accidents prescribed at the site of application and the TRGS 507 „Surface treatment in rooms and tanks“, as well as the safety precautions listed on the packing (label) required by the provisions of the Hazardous Materials Ordinance shall be adhered to. The operating instructions pursuant to § 14 GefStoffV as well as the EC safety data sheets are to be complied with.

Technical data	Test specification	Unit	Parameter
Density	DIN EN ISO 1183-1	g/cm <sup>3</sup>	2.1
Compressive strength	DIN EN ISO 604	MPa	100
Tensile strength	DIN EN ISO 527	MPa	20
Elongation at tear	DIN EN ISO 527	%	0.2
Flexural strength	DIN EN ISO 178	MPa	32
Modulus of elasticity (bending)	DIN EN ISO 178	MPa	7,500
Adhesive strength to coatings	DIN EN 24624	MPa	> 3
Hardness	DIN 53505	Shore D	90
Dissipation Resistivity (to earth)	DIN EN ISO 1081	Ω	> 10 <sup>9</sup>
Coefficient of linear thermal expansion	DIN 53752	K <sup>-1</sup>	35 · 10 <sup>-6</sup>
Max. operating temperature		°C	80

The technical data contained herein represents the current state of our product knowledge and is intended to furnish general information regarding our products and their application spectrum. In view of the diversity and multitude of application possibilities, this data should be regarded solely as general information, which does not guarantee any specific properties and/or suitability of these products for each concrete case of application. Consequently, when ordering a product, please contact us for detailed information relative to the properties required for a specific application. Our technical service will, upon request, furnish a profile of characteristics for the concrete application without delay.

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