

2K Tubecoat 110

2 component coating material

Product description:

2K Tubecoat 110 is a coating material based on sol-gel technology with high resistance and easy-to-clean surface for the use on concrete and cement-based surfaces.

Fields of application:

Concrete (road- and rail tunnel), subway, underground car park, bridge, cooling tower, waste pipe etc.

Product features:

- Single coat paint with high opacity
- Silky gloss
- Easy-to-clean
- Graffiti protection
- Good processability
- Resistant against chemicals and mechanical damage
- High weather- and UV-resistance
- Temperature resistance -20°C to + 150°C
- Resistant against de-icing salt
- CO₂- permeability (S_D-Value Carbondioxid > 75m)
- Water vapor permeability (S_D-Value: < 3m)

Product data:

Color:

White, grey, off-palette (further colors on request)

Delivery form:

2-pack System (Base component + Hardener)
4kg – can (Hardener)
24kg – Hobbock (Base component)

Shelf life:

At least 6 months in original closed can, stored at cool, dry conditions.

Technical data:

Type of binder:

Polysiloxan-Polyepoxid-Resin

Solid content:

> 98 %

Density:

1.59 g/L (Base)
0.99 g/L (Hardener)
Ca. 1.5 g/L (Mixture of Base + Hardener)

Consumption: 3-4 m²/kg at 120-200 µm (micron) dry layer thickness.
 The needed consumption depends on the roughness of the surface and application method.

Chemical resistance: Resistent against a variety of organic solvents.

Surface protection system OS-B

	Performance like DIN EN 1504-2	Requirement	Result
1	Cross Cut Adhesion test	≤ GT 2 Cutting width: 4 mm	0
2	CO ₂ -permeability	S _D > 50 m	S _D = 80.1 m
3	Water vapour permeability	Class I	2.72 m, Class I
4	Capillary water absorption and water-permeability	W < 0,1 kg/ (m ³ xh ^{0.5})	0.03 kg/ (m ³ xh ^{0.5})
5	Adhesion after temperature cycling test Using outdoor loading de-icing salt: thundershower test (temperature shock) (10x) And De-icing-changing test with de-icing load (50x)	≥ 1,0 N/mm ² ≥ 1,0 N/mm ²	4.93 N/mm ² 4.93 N/mm ²
6	Adhesion strength	≥ 1,0 N/mm ²	3.35 N/mm ²
7	Fire behaviour after application	Class E	B-s1, d0
8	Weathering according to DIN EN 1062-11:2002-10, 4.2 (UV-radiation and humidity), using outdoor only	No visible fault	No Blister, crack, peeling, small loss of gloss

Specifications tunnel constructions ZTV-ING Part 5, Chapter 1

	Performance	Requirement	Result
1	Wet rub resistance acc. to DIN EN ISO 11998	< 5µm after 200 cycles	0,6 µm, class I
2	Degree of gloss acc. To DIN EN ISO 2813	40 – 60 at 60°	57,4
3	Flammability acc. to DIN EN 13501-1	C-s3, d2	B-s1, d0
4	Clean ability acc. to DIN EN ISO 11998 and low soiling tendency	Visual examination	0 (200 rubbing cycles)

Processing:

Surface treatment: The surface has to be solid and stable (no loose parts). Furthermore free of dirt, dust and grease.
 2K Tubecoat 110 can applied by machine or manual in one application step without base coat. We recommend to test the material locally.

Underground without stable capability and dirt has to be cleaned before application (e.g. high pressure cleaner). Removing loose particles and dust are always necessary.

Level the uneven floor.

2K Tubecoat 110 can't be applied on old dispersion paint.

Application:

Ground-temperature: min. +5°C, max. +30°C
Ambiente temperature: min. +5°C, max. +30°C
Relative humidity: max. 85% r.L.
Can be applied on damp surfaces (tunnel)

Mixing ratio: Base : hardener
6 : 1 (by weight)

Stir Base before adding the Hardener. Mixture must be stirred well for a few minutes until a homogenous mixture is achieved. The completed material can be used 4h at 25°C.

The material can be applied with Airless-spraying, lambskin paint roller or paintbrush.

Curing:

Curing at room temperature
after 5h dust-dry (25°C)
after 12h hard-dry (25°C)

These values are for the orientation only. Weather conditions like humidity and temperature have an impact on the result.

Coating thickness:

ca. 100 – 200 µm after curing

Cleaning of tools:

Immediately cleaning with thinner for 2 component paints after use.
After curing only mechanical cleaning is possible.

The given data is for guidance only and is not a legally binding guarantee. The product has the properties described above. The product information sheet can and should only be used for general guidance.

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NTC Nano Tech Coatings GmbH, Marpinger Weg 2, 66636 Tholey, Germany, Tel.: +49 6853 96111-00, info@ntcgmbh.com