Technical Datasheet

TOPCOAT-PU 710

One-component, elastic, UV-stable, polyurethane protective coating

Description

TOPCOAT-PU 710 is a one-component, aliphatic, polyurethane coating forming a UV-stable membrane with the following benefits:

- simple application (one-component product),
- color stability,
- elasticity,
- resistant to light pedestrian traffic (domestic use only),
- resistance to frost,
- maintenance of its mechanical properties over a temperature span of -40°C to +90°C.

Certified according to EN 1504-2 and classified as a coating for surface protection of concrete.

Fields of application

TOPCOAT-PU 710 is used over aromatic polyurethane waterproofing membranes for increased UV protection and color stability.

Technical data

Properties of the product in liquid form

Form:	polyurethane prepolymer resin
Color:	white
Density:	1.26 ± 0.01 kg/l
Viscosity:	250 - 750 mPa·s (+23°C)

Properties of the cured membrane

Elongation at break: (EN ISO 527)	> 300%
Tensile strength: (EN ISO 527)	> 15 N/mm^2
Hardness according to SHORE D:	50
Adhesion: (EN 1542)	> 2 N/mm^2
Capillary absorption: (EN 1602-3, requirement of EN 1504-2: w< 0.1)	0.01 kg/m^2·h$^{0.5}$
Permeability to CO_2: (EN 1062-6, requirement S_d > 50m)	S_d > 50 m
Water vapor permeability: (EN ISO 7783-2, Class I, S_d < 5m)	S_d = 0.65 m
Artificial weathering: (EN 1062-11, after 2000 h)	Pass (no blistering, cracking or flaking)
Solar Reflectance (SR): (ASTM E903-12 & ASTM G159-98)	87%
Infrared Emittance ε (±0,02): (ASTM C1371-04a)	0.83
Solar Reflectance Index (SRI): (ASTM E1980-01)	109
Service temperature:	from -40°C to +90°C

Directions for use

1. Substrate preparation

The substrate must be completely dry, clean, free of grease, loose particles, dust, etc.
Existing polyurethane waterproofing membranes do not require priming.

2. Application

Before application, it is recommended to gently stir TOPCOAT-PU 710 until fully homogeneous. Prolonged stirring should be avoided to prevent air entrapment.
TOPCOAT-PU 710 is applied by roller or spray, in 1-2 layers, within 72 hours after the completion of the waterproofing job. The second layer should be applied crosswise after 4-24 hours, depending on the weather conditions.
Consumption: 0.12-0.25 kg/m^2/layer, depending on the substrate.

Tools should be cleaned with SM-28 solvent while TOPCOAT-PU 710 is still fresh.

TOPCOAT-PU 710

Packaging

5 kg and 15 kg containers.

Shelf life – Storage

9 months from production date, in original, sealed containers, in frost-free and dry conditions, away from direct sunlight.

Remarks

- TOPCOAT-PU 710 is not suitable for contact with chemically treated water of swimming pools.
- Temperature during application and hardening should range between +5°C and +35°C.
- Unsealed containers should be used as soon as they are opened and cannot be restored.
- TOPCOAT-PU 710 is intended for professional use only.

Volatile Organic Compounds (VOCs)

According to Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory i, type SB, is 500 g/l (2010) for the ready-to-use product.
The ready-to-use product TOPCOAT-PU 710 contains a maximum of 500 g/l VOC.

CE

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DoP No.: TOPCOAT-PU 710 / 1886

EN 1504-2

Surface protection products

Coating

Permeability to CO_2: Sd > 50m

Water vapor permeability: Class I (permeable)

Capillary absorption: w < 0.1 kg/m^2·h$^{0.5}$

Adhesion: ≥ 1.0 N/mm^2

Reaction to fire: Euroclass F

Dangerous substances comply with 5.3

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