

CLEVERPROOF™ COLD POLYUREA

TWO COMPONENT, FAST CURING, COLD APPLIED POLYUREA, WATERPROOFING MEMBRANE

DESCRIPTION:

CLEVERPROOF™ COLD POLYUREA is a two component, fast curing, cold applied polyurea waterproofing material. It creates an elastic and durable film layer on the surfaces. PU 650 TC 1K should be used as a top coat in order to use it in places exposed to UV and pedestrian traffic.

TYPICAL APPLICATIONS:

- ✓ Terraces and Balconies
- ✓ Bridges and Tunnels
- ✓ Wet areas
- ✓ Floors
- ✓ Undertile applications,
- ✓ Reinforced concrete structures

FEATURES AND ADVANTAGES:

- ✓ Easy to apply (via brush, roller or spray)
- ✓ It does not require expensive application equipment and machinery.
- ✓ The product provides a seamless single layer film which prevents leaks.
- ✓ It provides an elastomeric and hydrophobic layer.
- ✓ It is permeable to water vapor. It is breathable. It does not cause moisture accumulation in the substrate.
- ✓ Even if the COLD POLYUREA is damaged in some way, the damaged part can be repaired quickly and easily.
- ✓ Provides effective resistance against chemicals.
- ✓ Fast curing in all weather conditions.
- ✓ It has heat resistance performance between -40°C and +90°C.

CONCRETE SUBSTRATE STANDARDS:

- ✓ Hardness R28 : 15 Mpa
- ✓ Humidity : W < 5%
- ✓ Temperature : +5°C and +35C
- ✓ Relative Humidity : < 85%

For detailed information, please consult our technical department.

APPLICATION PROCEDURE:

SURFACE PREPARATION:

Before the application, to ensure a good adhesion oil, grease, paraffin waste, cement grout, loose particles, mold release agents, cured old membranes should be removed from the surface. After washing the surface with high pressure water, it should be thoroughly dried. Surface defects and cracks should be repaired with suitable products.

PRIMING:

Suitable CLEVERPRIME™ primers shall be used for priming. For absorbent surfaces such as concrete, cement or screed where surface moisture is < 5%; use PU PRIMER 200 or EPOXY PRIMER, for moist surfaces; use PU PRIMER 300-2K or EPOXY PRIMER WB and for non-absorbent surfaces such as metal, ceramic or old coatings use EPOXY PRIMER WB GLOSSY.

APPLICATION:

Firstly, components A and B should be mixed in their own containers in a low-speed mixer for 2-3 minutes. Afterwards, the components are combined and mixed in a low-speed mixer for 3 to 4 minutes and made ready for use. The material should be applied to primed surface with a roller or brush until the entire surface is covered, by pouring the product in at least one or two layers. If needed, the second layer can be applied 3 hours after the first layer is applied.

APPLICATION REMARKS:

- ✓ It should be covered with PU 650 TC-1K Aliphatic flexible top coat material in order to extend the strength and shelf life of polyurethane-based waterproofing products which are applied to areas exposed to open air conditions or pedestrian traffic.
- ✓ Not recommended for loose and unstable surfaces.
- ✓ It is not used for waterproofing of swimming pools with chemically treated water.

CONSUMPTION:

Single layer consumption (minimum): 1,50 - 2,00 kg/m²

CLEANING:

After the application, all tools should be cleaned with Clever 001. Rollers and brushes should be disposed of.

PACKAGING AND COLOR:

25 Kg. (Component A) + 1,5 Kg. (Component B) in metal bucket and Red (Ral3013) color.

STORAGE AND SHELF LIFE:

The product can be stored for a maximum of 12 months in its unopened original package at temperatures between +5°C and +25°C. Opened product should be used as soon as possible.

PRECAUTIONS:

The product should be used in well ventilated environments. The product should not be in contact with open fires. Smoking should not be allowed during application. Protective gloves and masks should be used for hands and eyes during application. If the

material comes into contact with eyes, it should be washed immediately with sufficient water. Adequate ventilation is required during application. For more detailed information, ask for the Safety Data Sheet (MSDS) from CLEVER POLYMERS technical department.

TECHNICAL DATA:

QUALIFICATION	METHOD	FEATURE
Coating Type	Clever Lab.	Pure Polyurea
Density	ASTM D 1475 / EN ISO 2811-1 (+20C)	1,30 (±0,05) gr/cm ³
Viscosity	ASTM D 2196-86 / EN ISO 3219 (+25C)	3,000 - 5,000 cp
Water Vapor Permeability	EN ISO 7783	0,8 gr / m ² Hour
Glossy	Clever Lab.	Semi Gloss
Application Temperature	Clever Lab.	+5° C to +35° C
Solid Content	Clever Lab.	90% (± 5)
Heat Resistance	Clever Lab.	100 days at +80° C
Shock Heat Resistance	Clever Lab.	200° C - Passed
Hardness	ASTM D2240, DIN 53505, EN ISO 868	50 (Shore A)
Elongation at Break	ASTM D 412 (+23° C)	> 600%
Pot Life	Clever Lab. (+25° C)	40 to 45 minutes
Tensile Strength	ASTM D 412 (+23° C)	> 13 N / mm ²
Adhesion to Concrete	TSE EN 1542 (+23° C)	> 2 N / mm ²
Service Temperature	Clever Lab.	-40° C to +90° C
Tack Free Time	25° C / 55% RH	2 to 3 hours
Recoat Time	Clever Lab.	3 to 6 hours

* Viscosity measured at + 25 ° C according to EN ISO 3219 standards. Viscosity increases inversely with temperature.

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