PU 140

Single Component, Polyurethane Based, Thixotropic Liquid Waterproofing Membrane

DESCRIPTION

PU140 is an single component polyurethane based, thixotrophic waterproofing membrane. It cures with the humidity in the air, easily applied. It forms a durable and elastic film layer by adhering seamlessly to the surface on which it is applied.

TYPICAL APPLICATIONS

- Vertical surfaces,
- Veranda and balconies,
- Walls,
- In the protection of PU foams,
- Wet areas,
- Flower pots.

FEATURES AND ADVANTAGES

- Application on vertical surfaces.
- Thixotrophic.
- Easy to apply (with roller or airless spray).
- Being a pure Polyurethane it is water-resistant.
- It preserves its mechanical properties between -40 °C and +60 °C.
- Low solvent.
- No toxic material content when totally cured.
- It is permeable to water vapor. Having a breathable structure it does not cause moisture accumulation in the substrate.

CONCRETE SUBSTRATE STANDARDS

- Hardness: R28 = 15 Mpa
- Humidity: W <10%
- Temperature: +5°C and +35°C
- Relative Humidity: <85%

For detailed information, please consult our technical department.

APPLICATION PROCEDURE

• SURFACE PREPARATION

In order 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 before the application. The surface should be thoroughly dried after washing with high pressure water and should be free from damp. Surface defects and cracks should be repaired with suitable products.

• PRIMING

For absorbent surfaces such as concrete, cement or screed, PU PRIMER 200 or EPOXY PRIMER should be used. AQUA PU PRIMER 2K or EPOXY PRIMER WB should be preferred on damp surfaces. TILE PRIMER should be used on non-absorbent surfaces such as metal and ceramic. Please examine primer table for detailed information.

• APPLICATION

Before the application, mix it with a low-speed mixer for 2-3 minutes. For spray application, add CLEVER 001 at a maximum rate of 5%-7%. The previously primed surface should be applied with a roller or brush until the entire surface is covered, by pouring the product in at least two layers. After the first coat is applied, the second coat should be applied within minimum 8 and maximum 24 hours. If the application of the second layer has not been made within the specifed time, before application please consult to the technical office of CLEVER POLYMERS for information and solutions. If needed, in order to increase the acceleration of the drying process in cold weather, it is recommended to use ACC CATALYST. Consult our technical department for thinning.

APPLICATION REMARKS

- It should be covered with PU 650 TC-1K or PU 600 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

- Total Consumption (minimum): 1,50-1,80 kg/m²

CLEANING

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

PACKAGING AND COLOR

It is grey in 5 kg and 25 kg metal buckets.

STORAGE AND SHELF LIFE

The product can be stored for a maximum of 12 months in unopened original pail at temperatures between +5°C and +25°C. Opened product should be used at the soonest.

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.	Single Component Polyurethane
Density	ASTM D 1475 / EN ISO 2811-1 (+20°C)	1,35 ± 0,05 gr/cm^3
Viscosity	ASTM D 2196-86 / EN ISO 3219 (+25°C)	5000 - 10.000 cp
Water Vapor Permeability	ASTM E96	0,8 gr/m^2 hour
Application Temperature	Clever Lab.	+5°C to +35°C
Hardness	ASTM D2240, DIN 53505, EN ISO R868	> 60 (Shore A)
Elongation at break	ASTM D 412 (+23°C)	> 800%
Tensile Strenght	ASTM D 412 (+23°C)	> 2 N/mm^2
Service Temperature	Clever Lab.	-40°C to +60°C
Tack Free Time	25°C / 55% RH	6 Hours
Recoat Time	Clever Lab.	6 to 24 Hours
Water Absorbency	Clever Lab.	%1

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