

Technical Data Sheet

Date: 07/01/2021 - Version: 01

CLEVERCOAT™ PU 640 TC 1K

ONE COMPONENT, POLYURETHANE BASED, TRANSPARENT, ALIPHATIC, TOP COAT

DESCRIPTION:

CLEVERCOAT™ PU 640 TC 1K is a transparent, one component, PU based, aliphatic top coat with high UV resistance. It cures with the humidity in the air and develops a transparent and glossy film layer. Thanks to its aliphatic structure, it preserves its color when exposed to sunlight, does not fade or turn yellow.

TYPICAL APPLICATIONS:

- ✓ Terrace, veranda and balcony
- ✓ Wet areas under coating (bathroom, kitchen, etc.)
- ✓ Indoor and outdoor application areas
- ✓ Irrigation Channels
- ✓ Asphalt Membranes
- ✓ Gypsum and cement panels
- ✓ Roofs exposed to UV

FEATURES AND ADVENTAGES:

- ✓ Easy to apply (by brush, roller or spray)
- ✓ It has excellent UV resistance.
- ✓ It provides excellent adhesion to the surface.
- Thanks to its aliphatic structure, it preserves its color when exposed to sunlight, does not fade or turn yellow.
- ✓ When applied, it provides a one-piece film layer that does not cause joint or leakage.
- ✓ It is resistant to continuous water contact.
- Preserves its mechanical properties between -40°C and +80°C.
- ✓ It has excellent chemical resistance.

CONCRETE SUBSTRATE STANDARTS:

✓ Hardness R28 : 15 Mpa
✓ Humidity : W < 10%
✓ Temperature : +5°C and +30°C
✓ Relative Humidity : < 85%

For detailed information, please consult our technical department.

APPLICATION PROCEDURE:

SURFACE PREPARATION:

Before the application, the factors such as oil, grease, paraffin wastes, cement grout, loose particles, mold release areas, cured old membranes that weakens the adhesion should be removed from the surface. After washing the surface with high pressure water, it should be dried. Surface defects should be repaired with suitable products.

PRIMING:

CLEVERPRIME™ PU PRIMER 200 should be used for absorbent surfaces such as concrete, cement or screed. It can be applied with a brush. There is no need for a primer as a top coat in Polyurethane and Polyurea applications.

APPLICATION:

Before the application, open the package and mix it with a low speed mixer for 2-3 minutes. While mixing the product, care should be taken not to mix air into the material at a high rate. If air is mixed into the material, visible air bubbles will occur after the material is cured on the floor. The material is poured over the primed surface and spread over the entire surface with the help of a roller or brush.

APPLICATION REMARKS:

- Not recommended for loose and unstable surfaces.
- ✓ It is not used for waterproofing of swimming pools with chemically treated water.

CONSUMPTION:

√ For each layers minimum: 0,15 - 0,20 kg/m²

CLEANING:

After the application, all tools used should be cleaned with the appropriate Clever 001. Roller brushes are disposable. The are only for single use.

PACKAGING AND COLOR:

It is transparent in 4 kg and 20 kg metal buckets.

PACKAGING AND COLOR:

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 fire. 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 Safety Data Sheet (MSDS) from CLEVER POLYMERS technical department.



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TECHNICAL DATA:

QUALIFICATION	METHOD	FEATURE
Coating Type	Clever Lab.	One component Aliphatic
		Polyurethane
Density	ASTM D 1475 / EN ISO 2811-1 (+20C)	0,95 gr/cm ³ (±0,01)
Viscosity	ASTM D 2196-86 / EN ISO 3219 (+25C)	100 - 200 ср
Water Vapor Permeability	EN ISO 7789	0,8 gr/m ² hour
Glossy	Clever Lab.	Bright
Application Temperature	Clever Lab.	+5°C to +30°C
Heat Resistance	Clever Lab.	100 days at + 80°C
Shock Heat Resistance	Clever Lab.	200°C
Solid Content	Clever Lab.	50% (±5)
Hardness	ASTM D2240, DIN 53505, EN ISO R868	> 60 (Shore D)
Elongation at Break	ASTM D 412 (+23°C)	550%
Tensile Strength	ASTM D 412 (+23°C)	50 N / mm ²
Adhesion to Concrete	TSE EN 1542 (+23°C)	> 2 N / mm ²
QUV	ASTM G154	2000 hours
Service Temperature	Clever Lab.	-40 to + 80°C
Tack Free Time	25°C / 55% RH	4 to 6 hours
Recoat Time	Clever Lab.	6 to 24 Hours

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

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