PU TC 810 Mat / PU TC 820 Technical Data Sheet

Definition and Feature

PU TC 810 Mat / PU TC 820 Polyurethane UV Resistant topcoat paint is a 2-component, highly elastic and polyurethane-based paint that maintains its constantly flexible structure. It is resistant to aging, water and sea water, salt and many chemicals, external weather conditions (acid, base, and many types of solvents); regarding to the film layer it forms, it provides high mechanical and chemical resistance and excellent adherence to different surfaces. It is not affected by frost and water waiting on it. It is resistant to impacts and friction, and has high tension, tear and abrasion resistance. It is resistant to UV rays and does not change color. It gives impermeability to the applied surface. It is a cold application and can be easily applied with a roller, trowel, brush or gun. It maintains its physical properties at -30ºC/+90ºC. It is permeable to water vapor and allows the surfaces it is applied to breathe.

Usage areas

PU TC 810 Mat / PU TC 820 is used in UV resistant topcoat paint, polyurethane based and poly urea based waterproofing systems; also it is applied as a protective topcoat in epoxy-based and polyurethane-based flooring systems. It can be used on metal surfaces such as iron, steel and aluminum with the suitable primer. It can be applied on concrete, stone, wood and marble and similar building materials with suitable primer. It can be safely applied outdoors due to its excellent UV resistance. Due to its superior properties, it is widely used in car parks, industrial facilities, warehouses, aircraft hangars and water treatment plants. Topcoat PU paint is part of coating systems. In cases where product application or detailed information about the product is required, we kindly ask you to consult our technical staff or visit our www.epozem.com website.

Specifications (23ºC and 55% RH)

• Colour:	In standard RAL colours
• Mixing Ratio :	Main material : Hardener = 6 : 1 (In weight)
• Solid Material :	70% - 80% (ASTM D2369)
• Walkability:	8 Hours -12 Hours
• Layer on Floor Application:	8 Hours -12 Hours
• SHORE A (7 Days):	65 – 70 (ASTM D2240 / DIN 53505 / ISO R868)
• Tensile Strength (7 Days):	> 4 N/mm² (ASTM D412)
• Adhesion Resistance (7 Days):	> 2.5 Mpa (ASTM D4541)
• UV Resistance (7 Days):	It has passed 1,000 hours of testing. (ASTM G154)
• Flash Point:	28 ºC (ASTM D93)
• Volatile Organic Compound:	200 – 250 gr/lt (ASTM D3960)

- Consumption: 0.200 – 0.300 kg/m² (up to katta)
- Fire Resistance: It has passed from the examinations and experiments. (TS EN ISO 11925-2)
  Test samples comply with TS EN 13501- Schedule 2 Efl class criteria.
- Viskozite (Brookfield): Resin: 500 cP – 2,500 cP Hardener: 200 cP – 400 cP (ASTM D2196-86)
- Density (gr/cm³): Resin: 1.35 Hardener: 1.00 (± 0.05) (ASTM D1475, DIN 53217, ISO 2811)
- Appearance: Glossy or matte, plain
- Taber Abbrassion: (CS 10 disc, 10 N weight, 500/1000 rpm) : 20/42 mg (ASTM D4060)
- Pendulum Hardness (7 Days):30 sn (DIN 53157)
- Erichsen Value: 10 mm (DIN ISO 1520)
- Anti-slip : Dry: R10 Wet: R10 (DIN 51131)
- Kaymazlık Scot :

	Dry	Wet	(ASM 825)
Mat:	1,20	1,11	
Semi-Glossy:	1,19	1,28	
Glossy :	1,26	1,28	

- Content: The hardener contains aliphatic isocyanate with low vapor pressure.
  The main material contains polyester and polyether resins and pigments.
- Shelf Life : 12 months in its original packaging, under 30 ºC, protected from frost
- Packing: 18.00 kg (17.00 kg base resin + 1 kg pigment) + 3.00 kg in packages

Technical Recommendations

The product must be consumed within the period of use, otherwise irreversible gelation will occur. All equipment should be actively cleaned after use. It is recommended to use protective gloves. It contains solvents and is flammable. Do not approach with an open flame and do not smoke during application. Work only in areas with sufficient ventilation and in open areas. Please note that solvent odor may occur in closed areas.

Surface Preparation

The coating to be applied must be cleaned of dust, oil, fat and similar foreign materials. It is recommended to do light grinding before application.

Application

The packages kept at room temperature for 24 hours are opened and the main material (resin + pigment) is first mixed within itself. Then, all of the hardener in the small box is poured into the main material and mixing is continued until the mixture becomes homogeneous. Mixing should be done with a low-speed electric mixer with a suitable structure. The material must be consumed within the usage period. The application is done by consumption control by roller, brush or spray method. Application on polyurethane or epoxy coating should be carried out within 24 hours. If this period is exceeded, the surface should be grinded to ensure that the final coat paint adheres to the surface. PU TC 810 Mat / PU TC 820, UV resistant topcoat paint should be applied in two coats with an interval of 24 hours. (It should not be waited more than 24 hours between coats, if 24 hours are exceeded, light grinding must be done before application. It should be taken into consideration that the waiting time will be shorter in hot weather and longer in cold weather) Only after the application should be started after the material is diluted with Mintepox Polyurethane Thinner in the suitable proportion (without exceeding the upper limits, if it is exceeded, the material may not get cured). The material to be applied should be protected against water and rain, external factors and mechanical stresses until it is cured.