

1. Product

COPSON PUR

2. Definition

One-component liquid polyurethane resin when is polymerized forms a continuous elastomeric membrane, waterproof, weatherproof, elastic and crack bridging ability POLIURETANO.

Thanks to its high mechanical properties, its ability to crack bridging, elasticity and resistance to the estate in general is an excellent alternative in waterproofing of planters and other areas to be applied waterproofing membranes in the presence of plants and plant of a different nature.

3. Characteristics of dry film

- Excellent adhesion on all types of surfaces (concrete, mortar, brick, cement, ceramic tiles, steel, zinc, aluminum)
- No precise armor based mesh or filters / geotextile (although it is advisable to use on edges or surface protection).
- Fast drying (even in situations of low temperatures and high humidity).
- The membrane obtained is completely waterproof but allows vapor diffusion.
- Resists permanent contact with water (not water emulsifiable).
- Elastic and resistant to cracking in the substrate ("crack bridging")
- Impact resistance and abrasion.
- Excellent resistance to microorganisms and to roots.
- Its bright and non-thermoplastic finished (not soften in summer) greatly prevents dust adhesion ("Anti-Dust").
- The membrane maintains its characteristics at temperatures between -50 ° C and + 100 ° C.
- Good chemical resistance (cleaning products, ...).
- Visitable without special protection.
- Completely stable against alkalis in the concrete. It can be covered with heavy protection (mortars, screeds, ...).

4. Dry film properties

- Dry material: 87 %
- Viscosity, a 20° C: 5000 mPa s
- Flash point (closed cup): > 47° C
- Hours refinish: 4
- Operating temperature: - 50 a 100° C
- Hardness Shore A: 70
- Tensile strength: 103 Kp/cm²
- Elongation: 452 %

TABLE OF CHEMICAL RESISTANCE:

Agent	Terms	Copson PU
Distilled water	24 h, 25° C	Ok
	24 h, 90° C	Ok
Sea water	24 h, 25° C	Ok
	24 h, 90° C	Ok
HCl	6 M, 24 h, 25° C	A
	6 M, 2 h, 80° C	A
	0'1 M, 24 h, 25°	Ok
	C 0'1 M, 24 h,	A
NaOH	1 M, 24 h, 25° C	Ok
Acetone	24 h, 25° C	C
Ethyl acetate	24 h, 25° C	B
Xylene	25 h, 25° C	Ok
Motor oil	24 h, 25° C	Ok
Brake fluid	25 h, 25° C	B / C

Ok= Without changes

A= Small deterioration. Some bubbles or easy to peel

B= moderately impaired. Ease to peel. Bubbles and / or softening

C= Great deterioration. easy to peel of the resin layer. great softening



5. Application areas

- Balconies, terraces .
- Planters in building.
- Bathrooms.
- Gutters and water tanks.

6. Instructions

The surface of the support to be waterproofed must be clean of any grease, dust or unbound materials, and dry to achieve good penetration and adhesion.

Before use, shake gently until the product is perfectly homogeneous, letting stand a few minutes to avoid air bubbles. Due to its high density may be necessary to dilute the product, although it is not recommended in the case of applications in vertical surfaces to minimize sagging effect. Also, since it is a self-leveling product, is recommended to add Copson PUR thixotrope additive to prevent sagging on vertical surfaces.

The product can be applied by brush, roller and airless gun, with a total yield of 1'5 to 2'0 kg / m² (1.4 to 1.9 mm thick) applied in 2 layers.

It can be applied in cold, wet weather. The rain before drying, does not affect the quality of the membrane, while the impact force can produce "craters" in the film, the recoating for adjustment may be necessary. In situations of low temperatures and humidities it is recommended to add the product accelerant Copson PUR.

The dilution and cleaning materials is carried out with solvent. re-pack it into a smaller container it is recommended to use the product in its entirety after opening the package, or (minimizing the amount of air in the container)

7. Copson Pur primer

In most cases, products based in component polyurethane, by their chemical constitution, offer good adhesion. However, the very consistency of the product, which has a large molecular weight and cohesion, coupled with a lack of absorption, can promote a peeled and failure in particularly complicated supports (gresite, rasilla, terrazzo, marble, tile, concrete highly polished or worn, non-porous concrete, glass, previous treatments epoxy / acrylic resins, ...).

On these occasions it is recommended to "slightly scratching the surface to be treated (generating some friction between materials and favoring adhesion between them).

Copson Pur primer allows create bridges with a high adhesion between the support and the treatment to be performed, so that a chemical bond occurs between both elements.

In any case it is recommended to apply these products on damp or wet substrates, nor oil or grease stains, dirt. Is advisable to apply the product abundantly on the surface to be treated, letting the water evaporate until dry to touch. In certain media of great difficulty or critical it is recommended to test it on a corner before determining your need.

The recommended allocation is about 0.15 kg / m². It is not advisable to let more than 12 hours between application of the primer and subsequent treatment.



8. Tixotropante Copson PUR

The products based on polyurethane have its advantages of being self-leveling, which greatly facilitates application on horizontal supports. However, on very inclined or vertical supports measures are needed to prevent sliding of the product on the surface to be treated, obtaining a film thickness as constant as possible and ensure the quality of the membrane is necessary. An alternative is the use of reinforced geotextiles which act as a brake on the back layer, but this possibility usually means a higher cost of labor and a loss of elasticity of the membrane.

Copson PUR thixotrope allows to obtain a membrane of sufficient thickness that we pick up on inclined or vertical supports, preventing the sagging effect. To do this, after homogenisation, the Thixotrope must be mixed 1 kg of thixotrope per 25 kg of pure product, stirring the mixture for a few minutes to get the full incorporation of the additive. Before the application must let stand the product for a few minutes the entire mixture reaches its thixotrope effect.

9. Copson PUR Acelerate

Copson Pur membrane despite its fast drying in most cases (low temperatures, high environmental humidity, etc.) may require an extremely short drying time, or help in cases of very low temperature and humidity environmental.

The accelerator Copson PUR, can greatly reduce the time drying product without sustaining a loss in properties, or changes in the product structure, also helping to obtain a virtually finished free of "bubbles" (CO2 trapped in the membrane).

It lets get "layer" on the surface of the product which in about 1 hour (minimizing the risk of disruption due to rain, slopes, etc.), and considered practically dry in 4 hours, also helping the elimination of the superficial "tack" in a short period of time. It is not recommended the use of Copson PU accelerator product when the outside temperature is above 20 ° C and the relative humidity is more than 60%

The product is formulated to act effectively in combination with 1/20 with Copson PUR (1 kg of accelerator per 20 kg of product), but a slight excess of this product does not harm the resulting membrane. Must be added the accelerant Copson PU in the desired amount to Copson PUR, and gently mix the product before application, until homogenisation, steeping a few minutes. The addition of PU accelerator has a slight effect on the product viscosity and may favor its application and leveling. However, this should consider to achieve sufficient strength and layer thickness (ideally 1'5 to 2'0 mm).

It allows a good drying time and is free of "tack" in about 4 hours. It also allows application of the product in extremely cold weather and wet (fog). In case of rain before full drying, it does not affect the quality of the membrane, although the impact force can create "craters" in the film, it may be necessary to apply another layer to regularize.

The addition of the accelerant Copson PUR makes totally imperative the use of its total amount of the product after mixing. The lifetime of the mixture is about 1 hour.



10. Finishing varnish transparent Copson PUR

Elastic aliphatic polyurethane resin, single-component solvent, transparent, curable by humidity to offer an additional protection to the membrane of Copson Pur (where wear resistant coatings at the same time that elastic, where the usual yellowing that suffer the polyurethanes in aromatic-base should be avoided).

It can be used as a protective layer for concrete floors due to its excellent resistance to base hydrolysis. Being based aliphatic isocyanate is resistant to color changes and yellowing. Its formulation allows application in thick layer without problems of bubbles or tarnishing.

- Solvent: xylene methoxypropyl acetate-2.
- Solids content (% by weight): 40.
- NCO content (% on solids): 3'8.
- Drying time (tack-free, exterior, 150 microns, 25 ° C): 6-12 hours depending on humidity.
- Tensile strength of the film (kp / cm²): 87
- Maximum elongation of the film (%): 322.

The resin cures by reaction with moisture in the air. It is in the form of a monocomponent product that does not need the addition of catalyst or additives. The product comes with a rate of 40% solids. It can be diluted and stored for later use but only if solvents exempt of moisture are used. Can also be used not alcohols or solvent mixtures are alcohols whose composition. The product is soluble in ethers, ketones, etc. It may be diluted in up to 40% Xylene without thereby appear turbidity. En todo caso, antes de probar un disolvente nuevo, se aconseja un ensayo previo. In any case, before trying a new solvent, a preliminary test is advised. If turbidity or solids formation occurs, it can be added a second solvent of higher polarity (ethyl acetate, butyl acetate, methoxypropyl acetate) for redissolution.

Make sure the surfaces are clean and dry, sand and clean the dust. It can be applied by brush and roller or spray gun. Depending on the thickness and the desired degree of protection could be applied 2 or 3 layers. It can be applied undiluted, as supplied; however, in the first hand it is advisable to dilute the product to an approximate concentration of 25% solid resin to achieve better penetration into the substrate. Are only suitable water-free solvents and containing no OH groups, such as alcohols. A suitable combination is 2 parts by volume of xylene and 1 part of methoxypropyl acetate. Do not apply below 5 ° C or in case of rain (water droplets can make the surface of the film while not dry). It is recommended to dry the product without passing over it for a minimum of 24 hours. The film reaches 100% of its properties after 15 days of curing. The film can be repainted as soon has reached a drying that is no longer sticky. It not recommended recoating after more than 24 hours.

11. Presentación y almacenamiento

The product comes in colors red and grey tile weatherproof and red oxide for the formulation No Intemperie formulation.

The products must remain tightly sealed in their original containers, protected from frost and strong sun exposure. Under these conditions, the shelf life of products is twelve months or so, from the date of manufacture.

This information replaces all prior information. The specifications and technical data that appear on this sheet are only guidelines corresponding to laboratory averages. Composan reserves the right to modify them without prior notice and declines any responsibility for their wrongful use.

