



RESINS

POLIUPLAN

THIXOTROPIC ELASTIC POLYURETHANE LIQUID MEMBRANE FOR CONTINUOUS WATERPROOFING

POLIUPLAN is a single component thixotropic elastic polyurethane liquid used for waterproofing. The material vulcanizes in contact with atmospheric moisture, and produces an elastic membrane with excellent adhesion to different surfaces. Apply with roller or brush in one or two layers with a minimum total consumption of 2.0 – 2.5 kg/sq. m.

POLIUPLAN is recommended in applications with cracks in the support, thanks to its stretching capabilities combined with its low modulus properties. The product is based on pure polyurethane and hydrophobic resins, which give it excellent waterproofing properties.

POLIUPLAN can be effectively protected against UV rays with an application of a thin layer of the already pigmented **POLIUPLAN RIV**



CE CERTIFICATION

The product meets the EU guidelines for these types of materials, EOTA (European Organization of Technical Approval).

USE

- Waterproofing roofs
- Waterproofing balconies, terraces and verandas
- The POLIUPPLAN waterproofed support can be left "in view" or tiled with a class C2TE glue.
- Waterproofing damp areas in bathrooms, kitchens, balconies, spare rooms, etc.
- Waterproofing of old asphalt, EPDM/PVC and acrylic membranes
- Protecting expanded polyurethane
- Waterproofing of bridges subject to pedestrian and vehicular traffic
- Waterproofing of hanging gardens, flowerbeds and pots
- Waterproofing and protection of concrete constructions including bridges, tunnels, stadium spectator seating, car parks etc.

CHARACTERISTICS AND ADVANTAGES

- Thixotropic: it can be applied to vertical surfaces without dripping.
- Excellent adhesion to almost any surface, with or without special adhesion primers.
- No dilution is required; however it may always be diluted with Solvente-01.
- Good heat resistance. Maximum service temperature 80°C
- Resistance to low temperatures: the membrane remains elastic even at -40°C.
- Excellent mechanical properties, high tensile strength and good tear resistance
- Good resistance to chemical agents.
- Breathable when in contact with water vapour: the membrane breathes, avoiding the accumulation of moisture under the membrane.



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**APPLICATION
METHODS**

It can be successfully applied to:

Cement, fibrocement, mosaic, cement tiles, old asphaltic and acrylic membranes as long as they adhere well to the support), wood, corroded metal, galvanized steel.

Cement support conditions (standard):

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

PRIMER choice for other conditions and other supports:

- Damp Support: **POLIUPLAN PRIMER**
- Highly porous supports: **POLIUPLAN PRIMER PO**
- Highly porous and damp supports: **POLIUPLAN PRIMER**
- Negative pressure or rising damp (Tanks): **POLIUPLAN PRIMER**
- Steel, galvanized steel, aluminium: **POLIUPLAN PRIMER**
- Wood: no primer **POLIUPLAN PRIMER PO.**
- Asphaltic membranes and coverings: **POLIUPLAN PRIMER.**
- Next coating after a number of days: **POLIUPLAN PRIMER.**

RECOMMENDATIONS:

When using **POLIUPLAN PRIMER**, on non-porous cement supports, we recommend diluting the primer with 5-10 % of Solvente-01.

PREPARING THE SUPPORT

Clean the surface using a water power washer, if possible.

Remove oil, grease, and contaminating soaps.

Remove the surface salts of the cement, any flaking particles,

chemical agents released from the moulds, and membranes retarding cement evaporation.

Fill the irregularities of the support with the appropriate products.

PRIMER:

Apply the most appropriate primer following the list above:

MIXING:

Use a low speed (300 rpm) electric mixer.

APPLICATION:

Apply at least two layers of the product with a roller or brush.

Do not allow more than 48 hours to pass between applying the two layers.

If more time elapses (for example more than 4 days), or if there are concerns about adhesion between the two layers, use **POLIUPLAN PRIMER.**

Le informazioni vengono fornite in buona fede e senza alcuna garanzia. L'applicazione, l'utilizzo e la lavorazione di questi prodotti vanno oltre il nostro controllo e quindi la nostra responsabilità. La responsabilità per errata applicazione o per qualsiasi altro motivo, per qualunque tipo di danni, si limita sempre al valore delle merci fornite da SYSTEM TECHNOLOGY. I prodotti e i sistemi sono fabbricati con il massimo della qualità.



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**RESINS****POLIPLAN****LIQUID PRODUCT**

CATALYSIS RATIO	SINGLE COMPONENT	
Composition	~ 95% dry matter in xylene	
Viscosity at 20°C	3.000 ± 600 mPa.s.	EN ISO 2555
Volumetric mass	1,45± 0,07 g/cm3	EN ISO 2811-1
Flash Point	< 42°C	ASTM 43, Coppa chiusa
Time of drying to the touch	5-6 hours	Conditions: 20 ° C 50% RH
Over-coverage time	6-24 hours	
Final hardening time	7 days	

MEMBRANE

Elongation at fracture	900 ± 80 %	ASTM D 412 - EN 12311-2
Non-volatile substance	> 95%	EN ISO 3251
Carbon dioxide permeability	Sd > 50 m	EN 1062-6
Capillary absorption and water permeability	< 0,01 kg/mq h 0,5	EN ISO 1062-3
Strength of adhesion through direct traction	> 4,0 MPa	EN 1542
Crack bridging Method A static Method B dynamic	A 5 (23) B 4.2 (23)	EN 1062 - 7
Tensile strength	7,45 + 0,3 N/mm2	ASTM D 412
Water vapour permeability	Sd < 5 m	EN ISO 7783-2
Resistance to water pressure	No loss (1 m d'acqua, 24h)	DIN EN 1928
Adhesion to concrete	> 2,0 N/mm2	ASTM D 903
Hardness (scale Shore A)	> 70	EN ISO 868
Resistance to penetration	Resistente	UNE 53420
Impact resistance	4 Nm	EN ISO 6272
Solar reflectance (SR)	0,87	ASTM E 903-96
Solar emission (ε)	0,89	ASTM E 408-71
Heat resistance (80°C for 100 days)	Passed no significant change	EOTA TR-01
UV resistance (INVE 2000) lamp P - 500 W	Excellent	50 h a 70°C
Resistance after aging due to water	Passed	EOTA TR-012
Hydrolysis 30 days at 55°C	Excellent	
Fire class Building materials	B2	DIN 4102-1
Resistance to sparks and to radiant heat	Passed	DIN 4102-7
Chemical properties	Good resistance against acids and alkaline solutions (5%), detergents, sea water, oils and hydrocarbons	

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CONSUMPTION Total minimum consumption: 2.0 – 2.5 kg/sq. m. with two layers

CLEANING Clean tools and equipment first with sheets of paper, then with Solvente-01
The rollers will not be reusable.

HEALTH WARNINGS **POLIUPLAIN** contains volatile and flammable solvents.
Apply in well-ventilated areas.
Do not smoke.
Do not apply in the presence of open flames.
Use forced ventilation and active carbon masks in confined spaces.
Remember that solvents are heavier than air and are therefore more concentrated closer to the ground.
Ask for the Product Safety Data Sheets.

STORAGE **POLIUPLAIN** Can be stored for a minimum of 12 months in original and unopened tubs, at a temperature of 5° C - 25° C in a dry place.
Once opened use immediately

PACKAGE 1 Kg , 5 Kg , 15 Kg , 20 Kg e 200 kg TUBS

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