

POLYUREA PS-007

Elastic polyurea for protection and waterproofing of areas, especially in substrates that suffer structural movements, where great elasticity is required.

- Rehabilitation of sheet metal and fibre cement roofs.
- Waterproofing of swimming pools, ponds, artificial fountains, etc.
- Waterproofing and encapsulation of fibre cement roofs.
- Waterproofing of walkways and balconies.
- Waterproofing of metal roofs.



PRODUCT DESCRIPTION

POLYUREA PS-007 is a fast-curing, liquid-applied, elastic, two-component, 100% solid membrane that can only be applied with a two-component hot spraying machine.

POLYUREA PS-007 is a membrane, which creates an elastic coating and without weight loss, has a very fast gel time, if compared to the products commonly available on the market. For this reason, specific equipment is required for your application. It can also be applied at very low temperatures, however environmental conditions do not affect its performance and final characteristics.

RECOMMENDED USES

For waterproofing and protection of light roofs, waterproofing of swimming pools, etc. Supports subjected to certain structural movements, their main applications are

- Rehabilitation of terraces.
- Waterproofing of bridges.
- Waterproofing and encapsulation of fibre cement roofs.
- Waterproofing of concrete slabs.
- Waterproofing of walkways and balconies.
- Parking pavements and roofs.
- Industrial and production facilities.
- Protective coatings.

FEATURES & BENEFITS

- Fast reaction and curing time.
- Almost immediate commissioning time. 100% solids.
- Excellent crack bridging properties.
- High resistance to solvents, acids and bases (consult the technical department).
Excellent corrosion protection.

PRESENTATION

The **POLIUREA PS-007** system comes in two formats:

Part A ISOCYANATE: Metal drum of 50, 220 Kg.

Part B POLIOL: Metal drum of 50, 210 Kg.

Part C PIGMENT: Buckets of 1.5 Kg.

Standard Colors: Red-Tile 3009, Grey 7012, White 9003, Blue 5012 and 5017, Green 6010, Suede 1002, Black 9005, also custom-made according to RAL letter:

STORAGE CONDITIONS

Part A RESIN: Part B	6 months
ISOCYANATE:	9 months from the date of manufacture, in its well-closed and non-deteriorated containers of origin, in a dry place at temperatures between +5° C and +30°

PRODUCT PROPERTIES

A:B MIX RATIO (by weight)	1:1.05
A:B MIX RATIO (by volume)	1:1
Gel Time*	9-10 sec
Touch Time*	16-20

*Data at Temperature of the components 23 °C, if it is higher the time may decrease, if the temperature is lower the curing times may increase.

MECHANICAL PROPERTIES OF THE MEMBRANE

ENSA YO	NORM	RESULTS
Membrane density		1.10 ± 0.05 kg/l
Solids content		100%
Elongation at break	UNE-EN ISO 527-1-3:1996	520%
Dureza Shore (A)	UNE-EN ISO 868	70-75
Dureza Shore (D)	UNE EN ISO 868	40-42
Tensile strength	UNE-EN ISO 527-1-3:1996	6.5-9.2 N/m
Tear	UNE-EN ISO 34.1	58 kN/m
Water Vapor Transmission	UNE-EN 1931:2001	μ= 2496
Adhesion		2.1 MPa on concrete
Behavior Essay on the fire		M2

METHOD OF APPLICATION

The system is applied with a high-pressure spraying equipment (14-20 MPa / 2000-3000 psi), with a fixed volumetric ratio of 1:1 and provided with a heating system in the hoses, which keeps the temperature stable during spraying. It is important that the temperature in the gun is 65 to 70°C. The system should be designed only on clean, dry surfaces free of particles from other sources. The product has optimal adhesion on rough surfaces.

It is recommended to apply a coat of primer before spraying the **POLIUREA PS-007** polyurea system to ensure adhesion. The application of primer-free polyureas on satin surfaces can present adhesion problems.

Due to its aromatic nature, it is recommended for indoor applications; if the use is outdoors, a PAVIFER-400Flex aliphatic polyurethane protection layer should always be applied once the membrane is at room temperature.

It can be applied in conditions of high ambient humidity. Do not apply if the wind speed exceeds 20 km/h.

For roof maintenance, the minimum application thickness must be 1.4 mm (consumption of 1.7 kg/m²). For maintenance of machinery and equipment, and pedestrian traffic, the minimum application thickness must be 2.6 mm (consumption of 2.9 kg/m²). Do not exceed 1 mm thickness per pass.

SUBSTRATE PREPARATION (primer)

These figures are theoretical and do not include any additional material, surface porosity losses, surface irregularity, variations in leveling and losses, etc.

Support	Primer	Consumption
Cementitious (wet) substrates	PAVIFER-305 diluted with 5% water	≈ 250 g/m ²
Cementitious (dry) substrates	PAVIFER-303 diluted with 5% epoxy solvent	≈ 250 g/m ²
Brick & Stone	PAVIFER-303 diluted with 5% epoxy solvent	≈ 150 g/m ²
Tile, non-vitrified ceramic	PS PRIMER undiluted	≈ 200 g/m ²
Bituminous membrane	PS PRIMER undiluted	≈ 150 g/m ²
Bituminous coatings	PS PRIMER undiluted	≈ 150 g/m ²
Ferrous or galvanized metals, lead, copper, aluminum, brass, or steel stainless	ZINC-RICH EPOXY PRIMER	≈ 200 g/m ²
Wooden supports	5 -30 diluted with 5% water	
Paints	Subject to adhesion and compatibility testing	

EC DECLARATION OF CONFORMITY

It complies with the requirements of **ETE 15/0332**.

Levels of use categories according to ETAG 005:

Outdoor Fire Behavior	Broof (t1, t2, t3 o t4) Froof (t1, t2, t3 o t4) NPD: soporte de XPS
Fire Rating	F
Life:	W2
Climatic zones:	S (Severe)
Usage Loads:	P1 to P2 with a minimum thickness of 1.4 mm (1.7 kg/m ²) P3 with a minimum thickness of 2.6 mm (2.9 mm) kg/m ²)
Slope of the cover:	S1 to S4
Minimum Surface Temperature:	TL2, -10°C
Maximum Surface Temperature:	TH4, +90°C

LEGAL NOTICES

This information and, in particular, the recommendations regarding the application and end use of the product, are given in good faith, based on the current knowledge and experience of POLIUREA SYSTEMS of the products when they are correctly stored, handled and applied, in normal situations, within their useful life, in accordance with the recommendations of POLIUREA SYSTEMS. Possible differences in materials, substrates and actual conditions at the place of application are such that no warranty in terms of merchantability or fitness for particular purposes, or any other written advice or advice offered, can be inferred from the information herein, nor from any other written advice or advice offered.

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