

# SOLSEAL PB-2K

## Two-component liquid membrane

For Waterproofing & Protection



ETA- 10/0095

### Benefits & Features

- CE Marked
- Excellent adhesion to most surfaces
- Can be used a joint sealant
- Highly elastic membrane
- Resistant to hydrocarbons
- Many pigment pastes available
- A low-cost solution for waterproofing & protection.



## SOLSEAL - Liquid Applied Systems

Last Issue Date 07.06.17

### Product Description

SOLSEAL PB-2K is a fast-curing, two component, bitumen-extended polyurethane fluid. It produces a highly elastic membrane with strong adhesion to many types of surfaces and excellent mechanical and chemical resistance properties.

It is based on a pure elastomeric hydrophobic polyurethane resin extended with chemically polymerised virgin bitumen.

Apply with brush, roller, spatula or airless spraying.

Minimum consumption: 1.0-1.5 lt/m<sup>2</sup>.

### Compliance & Certification

- CE: ETA-10/0095
- ASTM C836-95
- Root resistance - LGAI-06/10/2009

### Recommended For

Waterproofing and protection of:

- Pile Caps and beams
- Gypsum and cement boards
- Polyurethane insulation foams
- Asphalt membranes
- EPDM membranes
- Bathrooms (under tiles)
- Verandas and balconies (under tiles)
- Flower pots and roof-top gardens
- Roofs
- Light roofing made of metal or fibrous cement
- Non-potable water tanks
- Basements
- Foundations
- Bridge platforms
- "Cut-and-cover" tunnels
- Irrigation channels.

### Limitations

Not recommended for unsound substrates.

### Features & Benefits

- Components easily mixed, 1:1 by volume
- Fast curing
- Thick, bubble-free, membrane possible
- Being a two-component product means that the quantities not mixed can be stored for later use
- Its low modulus gives it excellent substrate crack-bridging properties
- Excellent adhesion on almost any surface, with or without the use of special primers
- No thinning is required but a solvent may be used
- Excellent thermal resistance, the product never turns soft. Max service temperature 80°C, max shock temperature 200°C
- Resistance in the cold: The film remains elastic even down to -40°C
- Excellent mechanical properties, high elongation, tensile and tear strength, high abrasion resistance
- Good chemical resistance
- Good water vapor barrier properties
- Can also be used as a joint sealant.

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#### Application Prerequisites

Can be successfully applied on:  
Concrete, fibrous cement, mosaic, cement roof tiles, old (but well adhered) acrylic and asphalt coats, wood, corroded metal, galvanized steel. For information about other substrates, please contact our tech department.

#### Concrete substrate conditions (standard):

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

#### Primer selection for special conditions and substrates:

Contact our tech department.

#### Application Procedure

Clean the surface using a high pressure washer, if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents, cured membranes, etc. must be removed.

#### Priming:

Use Solco Primer and follow the application instructions given on the technical data sheet.

#### Mixing:

Mix equal volumes of the two components manually or with a low speed (300 rpm) mixer. Apply mixed quantities immediately. Pot life (of mix): 30-45 mins at 20°C.

For application by airless spraying, the mix may have to be thinned with a small quantity of solvent, especially for low-power applicators.

#### Crack bridging:

Apply SOLSEAL PB-2K locally over any cracks larger than 1 mm before the main coat.

#### Application:

Apply the material with brush, roller or spatula.

#### Consumption

Minimum consumption: 1.0-1.5 lt/m<sup>2</sup>.

#### Packaging

2x5lt, 2x20lt, 2x200lt

#### Cleaning

Clean tools and equipment first with paper towels and then using solvent. Rollers will not be re-usable.

#### Shelf Life

Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of 5-25°C. Cap tins air tightly in order to store unused quantities.

#### Precautions

Contains a small quantity of volatile flammable solvents. Apply in well-ventilated, no smoking areas, away from naked flames. In closed spaces use ventilators and carbon active masks. Keep in mind that solvents are heavier than air so they creep on the floor. The MSDS (Material Safety Data Sheet) is available on request.

#### Technical Data

In liquid form (before application): ~90% dry matter in Xylene			
Property	Units	Method	Specification
Viscosity (Brookfield) Comp. A: Resin Comp. B: Asphaltic mix	cP	ASTM D2196-86, @ 25°C	1300 4300
Viscosity (Brookfield) of the mixture	cP	ASTM D2196-86, @ 25°C	3000
Specific weight of the mixture	gr/cm <sup>3</sup>	ASTM D1475 / DIN 53217 / ISO 2811, @ 20°C	0.97
Flash point	°C	ASTM D93, closed cup	> 40
Tack-free time, @ 77°F (25°C) & 55% RH	Hours	–	1-2
Recoat time	Hours	–	6-24

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#### Technical Data

The cured membrane:

Property	Units	Method	Specification
Service temperature	°C	–	-40 to 80
Max. temperature short time (shock)	°C	–	150
Hardness	Shore A	ASTM D2240 / DIN 53505 / ISO R868	35
Tensile strength at break @ 23°C	Kg/cm <sup>2</sup> (N/mm <sup>2</sup> )	ASTM D412 / EN-ISO-527-3	> 20 > (2)
Percent elongation @ 23°C	%	ASTM D412 / EN-ISO-527-3	> 1000
Tensile set (after 300% elongation)	%	ASTM D412	< 1%
Thermal resistance (200 days @ 80°C)	–	EOTA TR011	passed
QUV Accelerated Weathering Test (4hr UV, @ 60°C (UVBLamps) & 4hr COND @ 50°C)	–	ASTM G53	passed (1000 hours)
Chemical resistance (Sodium Hypochlorite NaOCl 5% 10 days)	–	–	unaffected
Hydrolysis resistance (Potassium Hydroxide 8% 10 days @ 50°C)	–	–	unaffected
H <sub>2</sub> O absorption (10 days)	–	–	< 0.9%