Rev. Date: 17.08.2020

Rev. No: 0

# INNO- SEAL FOX PURMAX SPRAYTEC® FS570

## Polyurethane Based, Two Component, Solvent Free, Fast Curing, Waterproofing Membrane Applied with Special Spray Machines

## **Description**

**FOX PURMAX® SPRAYTEC FS570** is a polyurethane-based, two-component, solvent-free, crack-bridging waterproofing membrane that does not lose its flexibility over time, cures quickly and does not form joints. Thanks to its application speed and fast curing feature, it minimizes the dwell time of the enterprises compared to traditional water insulation products. Since its reaction is very fast, it can be applied with the help of special spray machines.

In compliance with TS EN 1504-2 / Principle 1.3, 2.2, 5.1, 8.2.

## **Fields of Application**

- With FOX PURMAX® TOPCOAT or FOX PURMAX® POLYUREA TOPCOAT in terraces open to UV and sunlight,
- On roof, terrace, balcony and all wet areas,
- Swimming pools, Ornamental pools,
- · In aircraft hangars, tunnels, depots,
- · On parking insulation and coatings,
- •On water transport pipes and canallette,
- Underground water tanks and collection tanks,
- In prefabricated buildings,
- In steel structures,
- Under hot asphalt insulation applications,
- On the roof gutters,
- In flowerbed insulation,
- It is used on insulation of foundation and curtain walls from positive side.

## **Advantages**

- Cures in seconds, can be walked in minutes,
- Can be applied on horizontal and vertical surfaces,
- · Provides easy solutions in difficult details,
- Provides one piece application. There is no joint, overlay details,
- · Provides perfect adherence,
- Has excellent chemical resistance,
- Has excellent mechanical strength,
- Has high puncture resistance,
- Flexible, resistant to abrasion,
- Has crack bridging ability,
- Adheres perfectly to almost all surfaces (concrete, steel, aluminum, wood, foam, etc.),
- Hydrophobic (water repellent) feature,
- It is liquid impermeable and can be used in continuous contact with water,
- 100% solids, VOC-Solvent free,
- It has excellent thermal resistance, the product never softens again, maintains its elasticity at low temperatures,







Rev. Date: 17.08.2020

Rev. No: 0



#### **Technical Data**

Structure of Material	A Component B Component		Polyurethane Hardener Polyurethane Resin
Density	A Component B Component		1,10 gr/cm³ 1,05 gr/cm³
Color			Grey
Mixing ratio			100/73 (By Weight)
Elongation at Break	DIN EN ISO 527		100/70 (By volume) %400
Tensile Strength	DIN 53504		≥10 N/mm²
Breaking Strength	DIN 53504		≥18 N/mm²
Gel Time (hand mixing)			15-20 seconds
Shore A Hardness	DIN 53 50	28 days	85
Shore D Hardness	DIN 53 50	28 days	34
Carbon Dioxide Permeability			Sd>50 mt.
Capillary Water Absorption			W<0,1 kg/(m <sup>2</sup> *h <sup>0,5</sup> )
Surface Temperature			+10°C/+30°C
Highest Air Relative Humidity to be Applied			%85
Service Temperature	V 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		-40°C/+120°C (Short-term +250°C)

The above values are given for + 23°C and 50% relative humidity. High temperatures shorten the time, low temperatures extend the time

## **Surface Quality**

Concrete substrates to be applied must be solid and have sufficient compressive strength (at least 25 N/mm<sup>2</sup>). Tensile strength should be at least 1.5 N/mm<sup>2</sup>, humidity maximum 4%, ground temperature minimum +8°C. In addition, it should be noted that the dew point of the ground is above +3°C. The bottom surface is clean, dry and should be free from foreign substances such as all kinds of dirt, oil, grease, coating and surface curing materials.

## **Application Procedure**

## **Surface preparation**

In the application of **FOX PURMAX® SPRAYTEC FS570**, it is very important to prepare the ground and use the correct primer.

#### **Concrete Surfaces**

Oil, grease, fuel and paraffin wastes must be removed, as well as mold release agents, cement residues, chips, loose particles and cured membranes. Surface defects and uneven surfaces should be repaired with **FOX EPOMORTAR FC510** and **FOX FASTMORTAR FC245** fast setting repair and filling mortar. Surface cracks should be repaired by filling with **FOX PURSEAL PS600** polyurethane sealant.

## **Asphalt Surfaces**

Asphalt surface should be cleaned with water jet. In applications under vehicle traffic, the load-lifting capacity of the asphalt should be suitable for the loads in use. In order to at least 60% of aggregates are exposed, asphalt surface should be sandblasted with shot blast.

#### **Bitumen Surfaces**

Loose parts on the bitumen surface should be removed, blisters should be opened and dried. The main cracks should be opened, repaired and taped.

### Plywood / OSB Surfaces

Ensure that the plates are mounted correctly. All joints must be cleaned, taped with suitable tapes.

## **Iron and Steel Surfaces**

Before primer application, the surfaces should be sandblasted in SA 2.5 quality and cleaned.

## **Application Conditions**

- Surface moisture content should be below 4%.
- Test method: CM measurement or method of drying the material.
- There should be no rising humidity according to ASTM. (Polyethylene cover test).
- Relative air humidity should be 85% maximum







BAU PROFESSIONAL

Rev. Date: 17.08.2020

Rev. No: 0

## Watch Points in Application,

Surface Temperature; Minimum -5°C - Maximum +40°C Ambient Temperature; Minimum -5°C - Maximum +40°C

## **Application**

#### **Priming**

Surfaces to be made with **FOX PURMAX® SPRAYTEC FS570** should be previously primed with the appropriate primer selected from the primer selection chart below. Attention should be paid to the floor temperature (min +8°C).

Alternative priming systems that can be applied on reinforced concrete surfaces in accordance with the standard are as follows:

**Alternative 1:** Reinforced concrete surfaces are primed with **FOX EPOTHANE® PRIMER**, epoxy primer. If the surface is moist, **FOX EPOTHANE® PRIMER HB** epoxy primer should be used. It must be ensured that the application is applied to the whole surface without any gaps. Depending on the surface condition, if necessary, two layers are applied. While the material is still wet, 40-45 AFS (0.2-0.5 mm) silica sand is sprinkled on it. After the sanding application, a transition primer application should be applied with **FOX PURMAX® PRIMER 1K** to increase the adhesion strength of the surface prepared with the waterproofing material to be applied. This priming system must be necessarily used on reinforced concrete curtain surfaces.

Alternative 2: It is necessary to apply an impregnated primer with FOX EPOTHANE® PRIMER SL for filling the capillary cracks that may occur in the structure of the concrete, when the concrete surface is porous and dusting. If the surface is moist, FOX EPOTHANE® PRIMER HBF impregnated primer should be used. Afterwards, FOX EPOTHANE® PRIMER FL should be applied on dry surfaces and FOX EPOTHANE® PRIMER HB-FL epoxy primer should be applied on damp surfaces in order to remove surface defects on concrete and obtain a homogeneous surface.

For different types of surfaces, suitable primers should be selected from the primer selection chart.

#### **Primer Selection Table**

Surface Condition	Recommended Primer	
Concrete in accordance with the standard	FOX EPOTHANE® PRIMER, FOX EPOTHANE® PRIMER HB,	
Moist substrates (with Moisture Barrier)	FOX EPOTHANE® PRIMER HB, FOX EPOTHANE® PRIMER HBF, FOX EPOTHANE® PRIMER HB-FL	
Steel, galvanized steel and aluminum surfaces	FOX EPOTHANE® PRIMER WA,	
Wooden boards surfaces	FOX PURMAX® PRIMER 1K,	
Asphalt and Bitumen membrane surfaces	FOX EPOTHANE® PRIMER SL, FOX EPOTHANE® PRIMER HBF, FOX PURMAX® PRIMER 1K,	
Re-application on application (Old-New)	FOX EPOTHANE® PRIMER WA,	
Non-porous concrete and non-absorbent surfaces	FOX EPOTHANE® PRIMER SL, FOX EPOTHANE® PRIMER HBF, FOX PURMAX® PRIMER 1K	
Ceramic, marble, granite surfaces	FOX EPOTHANE® PRIMER WA	

#### Coating

FOX PURMAX® SPRAYTEC FS570 system solutions and applications should be applied through Expert Practitioner Dealers certified by FOX BAU PROFESSIONAL Technical Service.

#### Topcoat

FOX PURMAX® SPRAYTEC FS570 does not have sufficient UV resistance. FOX PURMAX® POLYUREA TOPCOAT or FOX PURMAX® TOPCOAT products are applied with the help of a roller or airless spraying machine in order to provide sufficient UV resistance.

#### Cleaning of the Tools

Tools and equipment used after the application should be cleaned with solvent. **FOX PURMAX® SPRAYTEC FS570** can only be mechanically cleaned from the surface after hardening.







YAPI KIMYASALLARI Construction Chemicals

Rev. Date: 17.08.2020 Rev. No: 0

#### Coverage

**FOX PURMAX® SPRAYTEC FS570**, under normal conditions, a thickness of approximately 2.0-2.2 mm is obtained with a consumption of 1.8-2.2 kg/m². In some special cases, the consumption may go up to 4.0 kg/m².

#### **Watch Points**

- Concrete surfaces to be coated with polyurethane must be at least 3 weeks old before application, creating a vapor barrier layer on the floors that sit on the ground, and the roof, walls, doors and windows of the building have been made, the ambient and surface temperature must be at least -5°C and +40°C.
- The materials to be used should be brought to the application area 1 2 days in advance and must be adapted to the ambient conditions.
- Rain, dust, wind, animals and pest must be prevented from entering the building when the coating is fresh.
- Consumptions are given for ideal conditions where ambient and surface temperatures are considered as 20°C. Actual consumption may vary depending on the surface structure. It should be remembered that consumption will increase in bad surfaces.
- FOX PURMAX® SPRAYTEC FS570 A and B components are ready to use products. During application, solvent etc. should not be added to the product.
- Used packages should be stored in a way that prevents re-use.

#### **Package**

A Component; 225 kg barrel B Component; 220 kg barrel

#### Shelf Life

When stored properly at room temperature, away from direct sunlight, between +15°C and +25°C, shelf life is 6 months from the date of production. Opened packages should be consumed within 1 week by stored in appropriate storage conditions.

#### Storage

Should be stored in its original package, in a cool and dry place protected from frost. In short-term storage, maximum 3 pallets should be placed on top of each other and shipment should be made with the first-in, first-out system. In long-term storage, pallets should not be placed on top of each other.

## **Safety Precautions**

It is dangerous to approach the storage and application areas with fire. Storage and application areas should be ventilated.

During the application, work clothes, protective gloves, goggles, masks in accordance with the occupational health and safety rules should be used. During storage and application, the material should not be contacted with the skin and eyes, if contacted, should be washed immediately with plenty of water and soap, and if swallowed, should be sought medical attention immediately. Foods and drinks should not be taken into the application areas. The material should be stored out of the reach of children.

For detailed information, please refer to the Material Safety Data Sheet.

#### Disclaime

The data contained in this technical document is based on our scientific and practical knowledge. SARTECH Yapı Malzemeleri San. ve Tic. Ltd Şti. is only responsible for the quality of the product. From the results that may occur due to misuse and other than written suggestions about where and how to use the product, SARTECH Yapı Malzemeleri San. ve Tic. Ltd Şti. cannot be held responsible. The responsibility of the correct application of our product belongs to the user. Our company is only responsible for the quality of the product. This technical form is valid only till a new version is implemented and nullifies the old ones. Our company has the right to make changes in all kinds of information and content details in this catalog. It is imperative to check that the information in the catalog is current and valid. All rights reserved.







Rev. Date: 17.08.2020

Rev. No: 0





#### 1020

Sartech Yapı Malzemeleri San. Tic. Ltd. Şti. Antalya Organized Industrial Zone Part 1, Street 7, No: 6 Döşemealtı / ANTALYA / TURKEY

20

**Dop No:** 0101 **EN 1504-2:2004** 

## **FOX PURMAX® SPRAYTEC FS570**

Polyurethane Based, Two Component, Solvent Free, Fast Curing, Waterproofing Membrane Applied with Special Spray Machines

Principles 1.3, 2.2, 5.1, 8.2

Determination of Carbon Dioxide Permeability / Sd>50 m Determination of Water Vapor Transition Properties / Class III Sd $\geq$ 50 m

Capillary Water Absorption and Determination of Water Permeability / W<0,1 kg/(m $^{2*}h^{0,5}$ )

Determination of Adhesion Strength by Pull-off Method / Flexible Systems

With Traffic Load  $\geq 1.5$  (1.0 min) N/mm<sup>2</sup> Determination of resistance to abrasion / <3000 mg

Determination of resistance to impact/ Class II: ≥10 Nm

Reaction to Fire / Class E

Dangerous Substances / According to Matter5.3



