Revision Date: 24.01.2022 Revision No: 01



#### **NEXT GENERATION TORTOISE SOLUTIONS**

### TORTOISE® TORPUR BPU 2K

## Bitumen/ Polyurethane Based, Two Component, Liquid, Waterproofing Material

#### PRODUCT DESCRIPTION

**Torpur BPU 2K** is a two component, liquid, bitumen / polyurethane based waterproofing coating that bridges cracks, curing with air humidity. Adheres perfectly to different surfaces and creating a durable and elastic film. Has high mechanical and chemical resistance and resistant to tensile, tear and abrasion with its permanent flexible structure.

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

#### **APPLICATION AREAS**

**Torpur BPU 2K** is used for the protection and waterproofing of the following surfaces that are not exposed to direct sunlight;

- Terrace, roof and rain gutters,
- Patios and balconies,
- Construction bases and flores,
- Retaining walls
- Wet surface under tile,
- Light roofing made of metal or fibers from materials,
- Bitumen, PVC, EPDM based membranes,
- It is used with suitable primers on concrete, wood and metal surfaces.

#### **PROPERTIES**

- Suitable for cold application and can be easily applied with a roller, trowel, brush or airless spray gun.
- Creates a crack bridge.
- No additional applicable.
- · Resistance to ponding water
- High resistance to frost.
- It maintains physical properties at -30°C / + 90°C.
- Water vapor permeable and allows the surfaces to breathe.
- Excellent adherence properties.

- Shows effective resistance to chemicals.
- Does not contain toxic substances after curing.
- It is elastomeric hydrophobic polyurethane resin based and supported with polymerized bitumen.

#### **PRODUCT INFORMATIONS**

#### **PACKAGING**

• A + B = 15 + 15 kg

#### COLOR

Black

#### SHELF LIFE

 The shelf life is 12 months if the specified storage conditions are followed in its original unopened packaging.

#### STORAGE CONDITIONS

- Store in a dry and cool environment (between +15°C / + 25°C)
- It should be protected from water, frost, heat, ignition, direct sunlight and adverse weather conditions
- The date of manufacture is on the label.
- Even if opened packages are tightly closed, since the inside of the product will cure quickly, the opened cans should be consumed in short time.

#### **CONSUMPTION**

As Two layer 1,500 – 2,000 kg/m² min.

Consumption may vary depending on surface roughness, ambient and surface temperature and application method.

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## APPLICATION INSTRUCTIONS SURFACE PREPARATIONS

Application surfaces should be dry and clean. Concrete and plaster residues should be mechanically; Oil, grease, fuel and paraffin wastes should be cleaned using chemical solvents. Damages and cracks must be repaired with products that are available.

Torpur BPU 2K should be applied priming with a suitable primer based on epoxy or polyurethane after depending on the surface condition.

- Hardness of application concrete (R28 = 15 Mpa)
- Temperature: 5-35 °C
- Relative humidity of air: < 85%

#### **PRIMING**

Highly absorbent surfaces such as concrete, cement screed or wood; Before priming, the primer should be applied after the film is saturated with PU primer.

It carries great importance for a correct application that the surface is smooth and saturated with primer. If the surface is not cleaned and primed properly, it can lead to the removal of the applied product from the surface, and the formation of problems such as bubbles, craters, pinholes etc. on the surface.

#### **PRIMER SELECTION**

#### PREPERATION of MATERIAL

- Torpur BPU 2K Considering the mixture life of the two components, the amount to be consumed should be prepared at the specified mixing ratio. In order to obtain a homogeneous mixture, the product temperature should not be less than 15 ° C. The A component should be stirred quickly with a mechanical mixer, adding the hardener (component B) to the mixing ratio. Components A and B should be mixed with a mechanical mixer for at least 3 minutes until homogenous.
- The packages should be kept at room temperature for 24 hours and when opened, should be mixed until homogenous consistency before application. Mixing should be done with a suitable low speed mixer and appropriate mixer tip.

#### **APPLICATION**

**Torpur BPU 2K** is applied by roller, trowel, brush and airless spray.

The mixture, which is ready for application, is applied to the surface to be saturated and pores to be closed. New coat application time is at least 4 hours (23°C), up to 24 hours. The

SURFACE PROPERTIES	Torpur Epoxy Primer Barrier	Torpur Epoxy Primer	Torpur Primer EP Filler	Primer AS 014	Torpur SA 015
Humidity ≤ %4	<b>✓</b>	<b>✓</b>		<b>✓</b>	
Humidity %4 - %8	<b>✓</b>				
Non-uniform Concrete Surfaces			✓		
Metal, Aluminum, Marble, Ceramic, Galvanized Coated Surfaces					✓
Wood	✓				<b>✓</b>
PVC				<b>✓</b>	✓
Highly Absorbent Surfaces	<b>✓</b>	<b>✓</b>		<b>✓</b>	
Bitumen Coated Surfaces				1	

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primer surface should be sanded before the application of new coats exceeding 24 hours. It

is very important that the second coat is applied within the new coat application period mentioned above. It reaches a complete mechanical and chemical resistance in 5 days(23 °C, 55 % RH).

**Torpur BPU 2K** is applied with a thin comb trowel, airless spraying machines or brush or roller.

- Do not wait more than 24 hours between coats.
- The primer surface should be sanded before the application of new coats exceeding 24 hours.
- If the application is intended to be applied by spraying method, the material should be applied after the thinning of Tortoise Polyurethane Thinner.
- Packages that are waited in room temperature for 24 hours should be opened and mixed until homogenous.
   Mixing should be done with low speed mixer and appropriate mixer tip.
- Torpur BPU 2K spreads
   homogeneously by making
   consumption control on the primed
   surfaces with the help of thin comb
   trowel, short-hair roller brush or airless
   spray gun.
- The layer must be protected against water and rain, external influences and mechanical stress until it is dry.
- If the second coat is applied, it should be waited between the coats ( approximately 12 - 24 hours). It should be taken into consideration that waiting time can be shortened in hot weather and it can be extended in cold weather.

 The product should be applied in thin layers to avoid problems such as pinhole and crater.

#### **SAFETY**

- Wear gloves, goggles and protective clothing.
- In case of contact with skin, wash with soap and water.

Users should refer to the latest Material Safety Data Sheets, including physical, ecological, toxicological, and other safety-related data for information or advice on the safe transport, storage, disposal of chemical products.

#### **CLEANING TOOLS**

- Cleaning of the tools should be done with soapy water before curing.
- After curing cleaning should be done with thinner.

#### **LIMITATIONS**

- On substrates likely to exhibit outgassing apply during ambient and substrate temperature. If applied during rising temperature pin holing may occur.
- Do not apply when surface is in direct sunlight.
- Clear coating may turn opaque and cloudy due to moisture penetration, especially in exterior applications.
- Do not dilute under any circumstance.
- It should not be applied in closed areas due to long-term solvent odor or the environment should be well ventilated.
- · Contains solvent, flammable.
- Do not contact with open flames and do not smoke during application.
- Do not swallow, Do not use empty packages for storing foodstuffs and do not throw them into fire.
- For professional use only, keep out of the reach of children.

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In closed areas due to long-term solvent odor and/or vendors the environment should be well ventilated.

#### **DECLERATION**

The information contained herein and in particular the application and end-use recommendations are provided in good faith, based on our current knowledge and experience, when properly stored, prepared and applied. The document, not being able to cover all possible scenarios or imply product suitability for every case of application. Products, application surfaces and application areas are quite diverse in practice. Therefore, when using our products, be sure to apply the right product in the right conditions and in the right place, and strictly follow the information and instructions given by our company regarding commercial convenience and/or suitability for a particular purpose. Otherwise, our Alpa is not responsible for damages that may occur.

The user of the product (user) must test the suitability of the product for the application and purpose for which it intends to use the product. We reserve the right to change the specifications of our products. Property rights of third parties should be observed. Upon acceptance of all orders, our current terms of sale and shipping shall prevail. Users should always consider the latest edition of the Product Data Sheet (TDS), which we can obtain from our company or our website, by contacting our company for the relevant product.



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TECHNICHAL DATA				
PROPERTIES (23°C&%55 RH)	UNIT	METHOD	SPECIFICATIONS	
Mixing ratio				
A Component			1:1	
B Component			1.1	
Viscosity (BROOKFIELD) BPU 2K A Comp.	сР	ASTM D2196-86 / TS	3000–5000	
BPU 2K B Comp.	CF	5833 / EN ISO 3219	2000-4000	
Density		ASTM D1475/		
BPU 2K A Comp.	gr/cm <sup>3</sup>	DIN 53217/ISO 2811	0,95 ± 0,05	
BPU 2K B Comp.  Flash point			1,05 ± 0,05	
BPU 2K A Comp.	οС	ASTM D93	>30	
BPU 2K B Comp.			> 59	
Time To Be Able To Walk On	Hours	-	16-24	
Full cure	Day		5	
Recoat time	Hours		12-24	
Hardness (7 Days)	Shore A	ASTM D2240 / DIN 53505 / ISO 868	30-40	
Tensile strength (7 Days)	N/mm <sup>2</sup>	ASTM D412	> 2,5	
% Elongation OlyWre	%la	ASTM D412 / EN-ISO- 527-3	> 2000	
Pot Life	min		40-50	
Adhesion to concrete	MPa	ASTM D4541	>2	
Volatile Organic Compound (VOC)	g/L	ASTM D3960	100-150	
Shelf life	month	-	12	
Solid content	%	ASTM D2369	85-90	
Service temperature	oC	-	-30/+90	