



#### İzopur P: Polyurethane Primer for Absorbent Surfaces

##### Description

One component, transparent polyurethane primer material for absorbent surfaces. It is used as primer material before İzopur application.

##### Fields of Application

- Priming of old and dusty surfaces.
- To increase the abrasion resistance of mineral based surfaces.
- Before İzopur application, priming of absorbent surfaces like wood, concrete, cement screed, cement based mortars etc.

##### Properties

- Excellent adhesion to absorbent surfaces.
- Penetrates deeply with high adherence to all mineral and concrete surfaces, it impregnates.
- Dries fast.
- Resistant to abrasion and water.
- Easy to apply (by brush, roller or airless spray).

#### Technical Properties

(at 23°C and 50% RH)

#### General Data

Appearance	Yellow color, transparent liquid
Shelf Life	9 months when stored in the original packaging.

#### Application Data

Tack Free Time(20 °C, %50 BN)	2 - 3 hours
Set to Light Traffic	12 hours
Final Curing Time(20 °C, %50 BN)	7 days
Consumption	200 - 250 g/m <sup>2</sup> in one coat, depending on porosity of the surface and application method.

#### İzopur: Polyurethane Based Waterproofing Material

##### Description

One component, ready-to-use, polyurethane-based waterproofing material that has high elasticity and mechanical strength.

##### Fields of Application

- Waterproofing of roofs, balconies and terraces.
- Protection of polyurethane foam insulation.
- Waterproofing and protection of concrete constructions like bridge decks etc.



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### Properties

- Easy to apply (by brush, roller or airless spray).
- Seamless, extra elastic membrane.
- Resistant to water and frost.
- Maintains its mechanical properties at a temperature span of -20°C to +80°C.
- Crack-bridging up to 2 mm, even at -10°C.
- Excellent adhesion.
- Resistant to UV rays.
- Easy to repair locally.
- Good resistance against acidic and alkali solutions, detergents, sea water and oils.
- Fills non-structural cracks and reduces water absorption.

### Technical Properties

(at 23°C and 50% RH)

### General Data

Appearance	Grey and White liquid
Shelf Life	9 months when stored in the original packaging

### Application Data

Application Temperature	(+10°C) – (+35°C)
Rain Stability Time	6-8 hours
Set to Light Traffic	12-18 hours
Final Curing Time	7 days
Consumption	1.0 – 1.2 kg/m <sup>2</sup> in a single layer, depending on porosity of the surface and application method.

### Performance Data

Density	1.35-1.45 gr/ml
Elongation at Break (ASTM D 412)	200% ± 50
Tensile Strength (ASTM D 412)	≥ 2.50 Mpa
Resistance to Water Pressure (DIN 1928)	No leak (1m. water column, 24 hour)
Adhesion to Concrete (EN 1542)	>1.5 N/mm <sup>2</sup> (concrete surface failure)
Hardness (Shore A Scale) (DIN 53505)	70 ± 5
Crack Bridging ( EN 1504-2)	23 °C ≥ 2.50 mm
Fire Class (DIN 4102-1)	B2
Chemical Properties	Good resistance against acidic and alkali solutions (10%), detergents, seawater and oils.



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### İzopur C: Polyurethane Topcoat

#### Description

One component, ready-to-use, UV-resistant, high elasticity and mechanical strength, polyurethane-based topcoat material.

#### Fields of Application

- On İzopur polyurethane based waterproofing membrane applied surfaces, like roofs, balconies, terraces etc.
- Protection of concrete constructions like bridges, etc.

#### Properties

- Easy to apply (by brush, roller or airless spray).
- Elastic
- UV resistant, non-yellowing and permanently elastic.
- Gives a glossy and easy-to-clean surface.
- Resistant to water and frost.
- Maintains its mechanical properties at a temperature span of -30°C to +90°C.
- Can be walked on.

#### Technical Properties

(at 23°C and 50% RH)

#### General Data

Appearance	White and grey liquid
Shelf Life	9 months when stored in the original packaging

#### Application Data

Application Temperature	(+10°C) – (+35°C)
Tack Free Time	1 - 3 hours
Set to Light Traffic	12 hours
Final Curing Time	7 days
Consumption	120 - 250 g/m <sup>2</sup> in one coat, depending on porosity of the surface and application method.

#### Performance Data

Density	0.95-1.1 gr/ml
Elongation at Break (ASTM D 412)	150%
Tensile Strength (DIN EN ISO 527)	≥4 Mpa
Adhesion to İzopur (ASTM D903)	>2 N/mm <sup>2</sup>
2000 hours Accelerated Aging Test Results (DIN EN ISO 4892-3, 400MJ/m <sup>2</sup> ) Surface chalking	No chalking observed.



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### Application

#### İzopur P Polyurethane Primer Application

- The substrate must be sound, dry, clean and free of any contaminants like dirt, oils, dust etc. that may prevent good adhesion. The surface must be cleaned from all loose materials like existing coating prior to application.
- Moisture content should not exceed 5%. Do not wash the surface with water!
- New concrete structures need to be cured for at least 28 days.
- Use Tamirart or Tamirart S40 in case of any loose and uneven substrates to get a sound and flat surface.
- Apply Waterproofing Tape on joints and edges. Otherwise horizontal and vertical connections and sharp edges should be smoothed by Tamirart S40 or Kalepolymas.
- For best results, the temperature during application and curing should be between 5°C and 35°C. Curing time increases at low temperatures.
- Apply İzopur P by brush, roller or airless spray on absorbent surfaces like concrete, cement screed or wood.
- If the substrate is very absorbent and brittle, apply two coats of İzopur P.
- After 2 - 3 hours (not later than 4 hours) and while the primer is still a bit tacky apply İzopur polyurethane waterproofing coating.

#### İzopur Polyurethane Waterproofing Application

- Stir well before using. Pour İzopur onto the primed surface and lay it out by roller or brush, until all surface is covered. In wide areas airless spray can be used.
- Always reinforce the problematic areas such as large surfaces, floor-wall joints, parapet corners, and chimney bottoms. For this, 50 - 60 gr / m<sup>2</sup> synthetic resin should be used. İzopur should be applied to the surface with a brush or roller and polyester felt should be placed by pressing on the applied surface. Felt must be pressed until it is soaked and saturated with enough İzopur.
- After 12 hours (not later than 36 hours) apply another coat of İzopur. Dry film thickness should not exceed 0.6mm for each layer of İzopur.
- For the protection of coating to obtain UV-stable and chalking-free surface, apply one or two coats of İzopur C over İzopur.

#### İzopur C: Polyurethane Topcoat Application

- İzopur C should be applied after 24 hours of İzopur application.
- Stir İzopur C well before using.
- Apply İzopur C by brush, roller or airless spray in one or two coats. Allow 3 - 4 hours (not more than 6 hours) to cure, between the two coats.



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### Crack Fixing and Waterproofing

- The cracks on the concrete should be clean, dry and sound, free of any contamination, which may harmfully affect the adhesion of the membrane.
- After priming with İzopur P, the surface should be left to dry for 3-4 hours.
- Primed cracks should be filled with Kalepolymas and one layer of İzopur polyurethane waterproofing material should be applied on it.
- Apply a correct cut piece of insulation fabric (50 g/m<sup>2</sup> polyester geo-textile) on the still wet İzopur.
- Press the fabric until it is soaked and saturated with enough İzopur.
- After 12 hours (not later than 36 hours) apply another coat of İzopur.

### Sealing and Repairing of Joints

- Clean concrete expansion joints and control joints of dust, residue or other contaminants.
- Widen and deepen joints (cut open) if necessary. The prepared movement joint should have a depth of 10 - 15 mm. and a width of 20 - 25 mm.
- Apply some Kalepolymas on the bottom of the joint only.
- Then with a brush, apply one layer of İzopur in 10 cm wide inside and on both left and right sides of the joint. Place insulation fabric (50 - 60 gr./m<sup>2</sup> polyester geo-textile) over the wet coating and with a suitable tool, press it deep inside the joint, until it is soaked and the joint is fully covered from the inside.
- Then fully saturate the fabric with enough İzopur. Fill the remaining free space of the joint with Kalepolymas sealant.
- Do not cover. Allow 12 hours to cure.

### Storage

- Protect from water, frost and severe weather conditions.
- Should be stored on wooden pallets in a clean, dry and moisture-free environment at between +10°C and +25°C.
- Burst or opened packages should be closed immediately and consumed first.
- Maximum 3 packages should be stacked on top of each other.
- Shelf life is maximum 9 months when stored in the original sealed packaging.

### Packaging

- İzopur P: 5 kg tin pail.
- İzopur: 25 kg tin pail.
- İzopur C: 5 kg tin pail.