

Polyurea Fast Primer



SINDEC
CHEMICALS

PFP-100

Fast Curing Polyurea Primer

Description

PFP-100 is a fast curing, cold-applied two component pure polyurea based primer. Especially designed for applications on rigid, porous and dry supports.

As an adhesion layer, sealant and strengthener for rigid, porous and dry substrates. Seal (concrete, cement) before the application of polyurethane or polyurea waterproofing membranes.

Coverage

Coverage varies widely due to the porosity and profile of different substrates.

Expect a consumption of 300-400 g/m²

* Coverage figures given are theoretical. Practical coverage rates may vary due to wastage factors and the type, condition, profile and porosity of the substrate.

Mixing

Pour part B into part A, stir and completely blend both components using a low-speed mixer using paddle mixer for a minimum of 3 minutes @ 300-400 rpm. Transfer mixed resin into a clean new bucket and mix for a further 2 minutes.

Product Application

Once mixed the primer should be applied immediately in a thin continuous film. Work the primer into the surface using squeegee then roll to avoid pooling.

On porous surfaces **PFP-100** will be absorbed very quickly, use enough required amount primer to ensure complete surface sealing.

Reaction rate increases with the size of the mixtures; therefore it is advised not to mix more amount of product than that can be easily applied in a **15 minutes period**. Otherwise, application could be difficult or the final appearance could be affected.

Moisture & Humidity

Air temperature should be between +10 and +30 °C. Relative humidity shouldn't exceed 60%.

Environmental Conditions

PFP-100 should not be used or applied at temperatures outside of at range of <10°C to >25°C *temperature control will be required if below this range, otherwise, this will effect the cure period, surface finish and strengths. Surface temperature must be at least 3°C above the dew point. Air temperature should be above 5°C and relative humidity at less than 70%,

Maximum application temperature is 40°C. Best conditions are 15°C to 25°C, these conditions should be maintained during all the curing time. Application should be carried out with plenty of air ventilation.

Substrate Requirements

Inadequate preparation will lead to loss of adhesion and failure. In coatings, there is a tendency for the finish to mirror imperfections in the substrate. Grinding or light self-contained shot blasting is therefore preferred. If in doubt, apply a test area first.

Requirements as follows:

- Flat and Smooth.
- Compact and Cohesive (Pull off test must show a minimum resistance of 1-4N/mm²).
- Minimum compressive strength of 25N/mm².
- Even and regular surface.
- Free from cracks and fissures. If any, they must be previously repaired (we recommend using Sindec Epoxy Crack Filler).
- Clean and dry, free of dust, loose particles, oils, organic residues, laitance and contaminants.

Oil & Grease

Isolated contamination should be removed using an appropriate degreaser, rinsed thoroughly, and allowed to completely dry. A coat of **OT-235 (Oil Tolerant Primer)** should then be applied (see separate datasheet)

Tool Cleaning

Tools and equipment should be cleaned whilst the resin is still wet using **Sindec Tool Cleaning Solution**





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Curing Times

Curing time depends strongly on the ambient conditions. The higher the temperature and humidity are, the faster Polyurea Primer Flex cures

Conditions	Touch Dry (h)
25°C, 40% hr, 200 g/m ² 10°C, 50% hr, 200 g/m ²	25min 45min

Technical Information

PRODUCT INFO BEFORE APPLICATION

	Component A	Component B
Chemical Description	Polyisocyanate Solution	Polyamine
Physical State	Liquid	Liquid
Packaging Kits	20 kg 4 kg	2 kg 0.4 kg
Non-volatile content (%) approximate	60	100
Flash Point	36°C	81°C
Colour	Light Yellow	Light Yellow

Mixing Ratio	A = 100 by weight	B = 10 by weight
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Mixture Properties 25°C	Density: 0.90-0.95 g/cm ³ Viscosity: 95 mPa.s Colour: slightly yellow
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Pot Life	Temp	Pot Life (100 g, min)
High temperatures and humidities reduce working time	25°C, 40% hr	60

In contact with air, the product can form a surface skin in the packaging. Remove the skin, if formed, and continue the application. High temperatures and humidities reduce working time

Storage	Keep between 15°C and 30°C. Component A may crystallize if stored for protracted periods under certain conditions. If this occurs, it can be restored to its original conditions by heating it to 70-80°C and stirring it thoroughly.
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Shelf Life 12 Months (if unopened)

FINAL PRODUCT INFORMATION

Final State	Solid Membrane
Hardness (Shore)	70 Shore D hardness after 7 day > 23°C
Chemical Resistance	Contact Sindec Chemicals for information
Mechanical Properties	Max. elongation: 53% Tensile stress: 37 MPa

UV Resistance

POLYUREA FAST PRIMER is an aromatic product. It will turn to yellow when exposed to sunlight, without impairment of its mechanical properties.

Disposal of Containers

Empty containers must be handled with the same precautions as if they were full. Treat empty containers as hazardous waste, and transfer them to an authorized waste manager. If the containers still have some material left, do not mix with other product before considering the risk of potential dangerous reactions.

Technical Advice

For further information on this or any other Sindec product, please contact our office.

Health & Safety

Before using this product, please ensure that you have received and read the product Safety Data Sheet. Refer to hazard labelling on the product. Wear gloves and avoid contact with skin and eyes.

Additional Information

The information contained in this document, and all further technical advice given is based on our present knowledge and experience. However, it implies no liability or legal responsibility on our part. In particular, no warranty or guarantee of product performance in the legal sense is intended or implied as the conditions of use and the competence of any labour involved in the application are beyond our control. Properties and coverage rates shown are for guidance purposes only. The user of the product must determine the product's suitability for the intended purpose.

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