

Waterproofing Systems / Polyurea Based

POLAN 700

Pure Polyurea Coating and Waterproofing Material

DESCRIPTION

100% polyurea based, double component, **flexible** spray coating and waterproofing material with high reactivity. **In can cover the cracks.**

APPLICATION AREAS

- Indoor and outdoor
- Residential buildings, shopping malls and business centers,
- Coating terraces, balconies and roofs,
- Waterproofing and coating of roads open to vehicle traffic, parking lot and garage floors.
- Waterproofing of canals, tunnels, pipelines, water tanks, potable water tanks
- Industrial zones, factory floors,
- Protection of middle and large size parts in metal industry against corrosion,
- Coating of load-bearing surfaces in commercial vehicles,
- Waterproofing of decorative pools and swimming pools.

TECHNICAL PROPERTIES

Appearance	
Density	Component A: 1.10-1.12 kg/L Component B: 1.00-1.105 kg/L (ASTM D 4052)
Mixing Ratio (A-B)	In weight: 110 Component A, 100 Component B In volume: 100 Component A, 100 Component B
Machine Application Temperature	Between +70°C and +80°C
Machine Application Pressure	Between 120 and 200 bars
Application Temperature	Between +5°C and +30°C
Solids Ratio	%100
Tensile Strength	15 – 20 N/mm ² (ASTM D 412)
%100 Modulus	5 – 8 N/mm ² (ASTM D 412)
Elongation at Break	%500-600 (ASTM D 412)
Tear Strength	30 – 55 N/mm (ASTM D 624)
Gel Time	3 – 5 sec.
Tack Free Time	13 – 15 sec.
Hardness (Shore A)	90 – 100 (DIN 53505)
Walk-onTime	1 - 4 hours (at +23°C)
Service Temperature	-40°C / +200°C

ADVANTAGES

- Environment friendly, solvent free,
- Elastic, covers capillary cracks
- Convenient for heavy vehicle traffic, can also be used in floors of industrial zones
- Allows application in horizontal and vertical surfaces
- Cures fast, applies easily
- Provides seamless and jointless waterproofing

- Offers solutions for hard to reach places such as corners
- Strongly adheres to the surface



- Resistant to chemicals and corrosion
- Has high tear strength
- Mechanically resistant, convenient for use in harsh conditions
- Resistant to abrasion and scratches.

CONSUMPTION

1.1 - 1.2 kg/m² in single layer for 1 mm thickness
(Varies depending on the absorption and roughness of the surface.)
Apply minimum 2 layers. Mix according to the ratios given on Technical Properties Table.

PACKAGING

Component A: 220 kg barrels
Component B: 200 kg barrels

APPLICATION

PREPARATION OF THE SURFACE

- The surface must be clear of dust, oil, tar, pitch, paint, silicone, curing material, detergent and mold oils, etc.
- Measure the moisture in the area before application to ensure that the surface is dry.
- Prime the surface with **REPOX AH Solvent Free Moisture Tolerant Epoxy Surface Primer** with high moisture barrier properties, following the repair and the cleaning. Apply polyurea within 12-24 hours after the primer application.

APPLICATION INFORMATION

- Mix POLAN 700 – Component B polyamine resin with POLAN 700 – Component A hardener (prepolymer) homogenously and apply with a spray equipment machine that can operate at high temperature and pressure.
- Since it cures fast, use only suitable machinery and equipment.
- Apply in a thickness of approximately 2 – 2.5 mm. There is no need to wait between floors.
- Reaches its mechanical properties fully within 24 hours.

CAUTION

- Store in closed and original packaging since POLAN 700 components A and B are highly sensitive to moisture. Avoid contact with moisture and air.
- Pay attention to ventilation conditions in closed spaces. It may cause serious health problems.
- Use only specific spray machines and equipment since it cures fast.
- Applications without floor analysis, monitoring the weather conditions and where a floor adhesive and moisture-tolerant primer are not used are highly risky. The floor must be dry and the percentage of moisture on the floor should be measured before the application. Humidity should be below 4%.
- Avoid storage at high temperatures as high temperature will shorten the shelf life.
- POLAN 700 is suitable for waterproofing drinking water tanks and swimming pools. It is not a final surface product as it is not UV resistant. It should be covered with coating materials with UV resistance.
- Do not apply on surfaces with negative water pressure.
- Check the ground moisture and adherence before application and determine the dew point.
- Protect the surface from water, rain, dew, frost and snow until it is completely dry.

SHELF LIFE



~~Expires in 6 months. Store unopened packages between +15°C and +25°C, in a cool and dry environment, protect from sunlight. Storage in high temperature shortens the shelf life.~~

HEALTH AND SAFETY

Contains isocyanate. As with all chemical products, avoid contact with food, skin, eyes and mouth during use and storage. During the application, work clothes, protective gloves, glasses and masks in accordance with the occupational and worker health rules should be used. Consult a doctor if accidentally swallowed. In case of contact with skin, wash with plenty of water. Do not approach with open flame and do not smoke during application. Work only in adequately ventilated areas. Do not leave the packaging cover open. It should be stored out of the reach of children.

* The application instructions and technical values given for the products have been obtained in our tests in accordance with international standards and our experience, at $23 \pm 2^{\circ}\text{C}$ temperature and $50 \pm 5\%$ relative humidity. These values may vary depending on ambient conditions. High temperatures shorten the durations, low temperatures extend them. Before starting the application, whether the product is suitable for the application and purpose should be tested by the user. FIXA Construction Chemicals is not responsible for application errors that may occur if the product is used outside of its intended purpose or if the application conditions and recommendations mentioned above are not followed. This Technical Data Sheet is valid until the next revision is published. FIXA reserves the right to change the values specified in this Technical Data Sheet, provided that a new version is published. It is the user's responsibility to check the currency of the document. For more information, please contact our sales department.

