

Waterproofing Systems / Polyurea Based

POLAN 700

Pure Polyurea Coating and Waterproofing Material

DESCRIPTION

100% pure polyurea based, double component, **flexible** spray coating and waterproofing material **with high reactivity**. It 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 medium and large size parts in metal industry against abrasion and corrosion,
- Coating of load-bearing surfaces in commercial vehicles,
- Waterproofing of decorative pools and swimming pools.

TECHNICAL PROPERTIES

Appearance	Component A: Light yellow colored liquid Component B: Grey colored liquid	
Density	Component A: 1.10 – 1.12 kg/L Component B: 1.00 – 1.05 kg/L (ASTM D 4052)	
Mixing Ratio (A-B)	In weight: Component A: 110 Component B: 100	In volume: Component A: 100 Component B: 100
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	
Solid Content	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-on Time	1 – 4 hours (at +23°C)	
Service Temperature	Between -40°C and +200°C	

ADVANTAGES

- Environmentally 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, easy to apply.
- Provides seamless and jointless waterproofing.



- Offers solutions for hard to reach places such as corners.
- Strongly adheres to the floor.
- Resistant to chemicals and corrosion.
- Has high tear strength.
- Mechanically resistant, convenient for use in harsh conditions.
- Highly 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 Component B of POLAN 700 – polyamine resin with Component A of POLAN 700 – 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 layers.
- 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 potable water tanks and swimming pools. It is not a final surface material 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 accordance with our tests and experiences in accordance with international standards at 23±2°C temperature and 50±5% relative humidity conditions. These values may vary depending on ambient conditions. High temperatures shorten the times, low temperatures lengthen them. Before starting the application, the user should test whether the product is suitable for the application and purpose. FIXA Construction Chemicals Ltd. is not responsible. This Technical Data Sheet remains valid until the next revision is published. FIXA reserves the right to change the values specified in this Technical Data Sheet, provided that the new version is published. It is the user's responsibility to check that the document is up-to-date. Please contact our sales department for more information.

