

Waterproofing Systems / Polyurea Based

POLAN 710

Hybrid Polyurea Coating and Waterproofing Material

DESCRIPTION

Hybrid polyurea based, double component, **flexible, with high abrasion and impact resistance and seamless coating capability, crack-bridging properties and high reactivity**, spray coating and waterproofing material.

APPLICATION AREAS

- Indoor and outdoor,
- Residential buildings, shopping malls and business centers,
- Coating terraces, concrete shear walls, foundations, balconies and roofs,
- Waterproofing and coating of roads open to vehicle traffic, parking lot and garage floors.
- Waterproofing and corrosion protection of canals, tunnels, pipelines, storage tanks, water tanks and drinking water tanks, Industrial surfaces, factory floors,
- Industrial surfaces and factory floors,
- Coating of medium and large-sized parts in the metal industry to prevent abrasion and corrosion,
- Protective coating of cargo-carrying surfaces in commercial vehicles,
- Waterproofing of decorative pools and swimming pools.
- Impact absorption in military areas and secure zones, and protection of military boats and ships against impact and the corrosive effects of salt water.

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 +10°C and +30°C
Solid Content	100%
Tensile Strength	>40 N/mm (ASTM D 412)
100% Modulus	6 - 8 N/mm ² (ASTM D 412)
Elongation at Break	>400% (ASTM D 412)
Tear Strength	15 – 30 N/mm (ASTM D 624)
Gel Time	8 – 10 sec.
Tack Free Time	17 – 20 sec.
Hardness (Shore A)	85 – 95 (DIN 53505)
Walk-on Time	1 – 4 hours (at +23°C)
Service Temperature	Between -30°C and +120°C

ADVANTAGES

- Environmentally friendly, VOC free and solvent free.
- Resistant to water and specified chemicals due to its chemical properties

- Provides excellent adhesion to various surfaces (such as steel, concrete, aluminium and wood) through its strong bonding properties.
- Offers high impact resistance and impact absorption due to its elasticity.
- Suitable for heavy vehicle traffic. Can also be used on industrial floors.
- Allows application on horizontal and vertical surfaces.
- Cures fast, allowing easy completion of the application.
- Provides seamless and jointless waterproofing.
- Offers solutions for confined, narrow and difficult-to-apply areas, such as internal corners.
- Provides high adhesion to the substrate.
- Offers very high resistance to chemicals and corrosion.
- Has high tear strength.
- Mechanically resistant, convenient for use in harsh conditions.
- Highly resistant to abrasion.

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

- POLAN 710 Component B, the polymix resin, should be homogeneously mixed with POLAN 710 Component A, the hardener (prepolymer), using spray equipment capable of operating at high temperature and pressure, and applied by spraying.
- 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 710 components A and B are highly sensitive to moisture. Avoid contact with moisture and air.
- Pay attention to ventilation conditions in closed spaces. Otherwise, serious health problems may occur.
- Use only specific spray machines and equipment since it cures fast.
- Applications without substrate analysis, monitoring of weather conditions and the use of a moisture-tolerant bonding primer carry a high risk. The substrate must be dry, and its moisture content must be measured before application. The moisture content must be below 4%. Avoid storage at high temperatures as high temperature will shorten the shelf life.
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- 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 +10°C and +30°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.