CLASS PUR-810

Two-Component Cold Polyurea

BENZKİM

Product Overview

It is a two-component, polyurea-based, high-strength liquid waterproofing material. It creates a robust insulation layer with exceptional adhesion to diverse surfaces. It offers significant mechanical and chemical resistance. It is applied cold and cures through a reaction with atmospheric moisture. It possesses high tensile, tear, and abrasion resistance. Its continuously elastic structure ensures superior crack-bridging capabilities.

Application Domains

- Gypsum cement panels are applied to tile or ceramic surfaces using an appropriate primer.
- It is utilized in stadium seating.
- It serves as the primary waterproofing membrane in bathrooms, roofs, lightweight metal or fiber cement roofs, asphalt membranes, and waterproofing systems for parking garages.

Technical Specifications

Colour	Colourful
Intensity	1,37-1,42 g/cm^3
Hardness	65 Shore A
Viscosity (Blend)	3000-4500 cP
Water Vapor Permeability	0.8 g/m^2 per hour
Tensile Strength	8 (N/mm^2) (+23°C)
Percentage of Elongation	≥%500
Mixture Pot Life	30 Minutes
Percentage of the Institution	4-6 Hours
Re-laying	12-24 Hours
Adhesion to Concrete	2,5 (N/mm^2)

The information presented in this technical data sheet is derived from experimental results. The responsibility for the proper application of our original product rests with the user. Our company is solely accountable for the product's quality. This data sheet supersedes the information provided in the previous version. Our company reserves the right to amend any information contained within this data sheet.

Advantages

- It possesses outstanding mechanical properties.
- It offers robust resistance to chemicals.
- It contains no harmful substances following the curing process.
- It exhibits cold resistance: The film maintains its elasticity at temperatures as low as -40°C.
- It demonstrates efficacy in water vapor permeability. As the film is breathable, moisture accumulation beneath the layer is prevented.
- It possesses outstanding thermal resistance; the product remains rigid. The maximum operational temperature is 90°C, while the peak shock absorption temperature is 200°C.

Surface Preparation

It is essential to ensure that the surface has attained its full strength. Newly poured concrete must complete its 28-day curing period. The surface should be devoid of any layers that may hinder adhesion, including oil, grease, dirt, paint, rust, and salt efflorescence. Weak surfaces, such as cracked plaster, should be removed by scraping off easily detachable materials. Enhanced results can be achieved by abrading the surface with a water jet or mechanical abrasive tool. Pores and holes should be cleaned using high-pressure air. The surfaces designated for application must be free of pits, segregations, and similar defects, which should be rectified with CLASS Remix Structural Repair Mortar. The application surface may be dry or slightly damp. The moisture content of the substrate concrete must not exceed 4%. The adhesion of the substrate to the surface should average 1.5 N/mm^2, and its compressive strength must be at least 25 N/mm^2. During application, it is crucial to ensure that the surface temperature is maintained at a minimum of +5°C.

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benzkimyapi@gmail.com benzkim.com

Mixture

In two-component packages, the mixture is calibrated according to the specified mixing ratio (Component A: resin, Component B: hardener). The ready-to-use material is achieved by thoroughly mechanically mixing these two components. The entire quantity of component B is added to component A simultaneously, and mixing should be conducted with a low-speed mixer (300-400 rpm) using an appropriate attachment until a homogeneous mixture is attained. To ensure uniform distribution of the hardener, mixing should occur near the edges of the container and from the bottom of the package. The quantity to be utilized should be prepared in accordance with the mixing ratio, considering the pot life of both components.

Application Details

CLASS PUR-810 can be applied using a roller, fine-toothed trowel, spray machine, or brush. The initial coat should be uniformly applied to the surface with the selected method. The subsequent coat is to be applied using the same technique after a maximum interval of 3-4 hours. The duration between coats must not exceed 24 hours. Should the interval surpass 24 hours, the surface of the first coat must be sanded. The material must be safeguarded against water, rain, external elements, and mechanical impact until it is completely cured. It is important to note that curing time may be reduced in hot conditions and extended in cold conditions.

Consumption

Double layer: 1.80–2.50 kg/m^2 (Consumption may vary based on the floor structure.)

PACKAGING

25+ 1.5 kg tin

Shelf life

In its unopened packaging, it can be stored for 12 months in a cool, dry location, shielded from sunlight, at temperatures ranging from +10°C to +25°C.

Attention

Avoid applications when the ambient temperature is below +5°C or above +30°C. Do not apply in direct sunlight, rain, or wind. Refrain from applying on surfaces that have been exposed to sunlight for extended periods, are frozen, or are at risk of freezing within 24 hours.

R10: Keep away from children.
R20/22: Harmful if inhaled or ingested.
R52/53: Toxic to aquatic life, may result in long-term detrimental effects in the aquatic ecosystem.
R65: Harmful. May result in lung damage if ingested.
S7: Store in a securely sealed container.
S24/25: Avoid contact with eyes and skin. S28: In the event of skin contact, rinse immediately with ample water.
S29: Do not release into the sewage system.
S46: If ingested, seek medical attention promptly and present the container or label.

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