

**GRADA COLD POLYUREA 2K**  
**Polyurea-Based, Two-Component, Cold**  
**Applied, Liquid Membrane Waterproofing**  
**Material**

**Product Technical Document**  
**Issue: 23.10.2019**  
**Revised:**

**Product Definition**

GRADA COLD POLYUREA 2K is a two-component cold applied, easy-to-use polyurea system. GRADA COLD POLYUREA 2K is an elastic water insulation product with high mechanical and chemical resistance. Adhesive to concrete, metal and mineral surfaces. Dries quickly, service period is short. Excellent crack bridging. Does not produce bubbles on surfaces properly prepared and undercoated.

**Areas of Application:**

Used for concrete structures, roofs, balconies, terraces, water tanks, secondary container waterproofing, Can be used as hot spraying repair kit.

**Advantages:**

Crack bridging up to 2 mm. Flexible. Suitable for 2 mm-thick single coat application. Provides monolithic surfaces that does not require joint filling. Fast curing

**Application Information:**

**Surface Preparation:**

The application surfaces should be dry and clean. The concrete and mold residues should be mechanically cleaned; oil, grease, fuel and paraffin residues should be cleaned by using chemical solvents. There should be no roughness, holes or cracks on the application surfaces. Such damaged and unsafe surfaces should be repaired and cleaned by using proper products. If necessary, they should be handled by floor grinding machines or diamond tools. The surface should be dedusted by using the industrial vacuum tools following this process. The prepared surface should be undercoated by a proper undercoating material. The undercoating process should be carried out twice for highly absorptive concrete surfaces. Upper surface retention of floor should be approximately 1.5 N/mm<sup>2</sup>, while pressure resistance is minimum 25 N/mm<sup>2</sup>. Ensure that the floor temperature is above +10°C during the application process. The application thickness should be 1.5 mm at least. It is important to control if it provides the ideal application by applying the material evenly on each part of the all application areas and measuring its thickness periodically. Ensure that the application surfaces are protected (from water, dew, dust etc.) for 24 hours at least. In areas under constant UV light exposure, covering the surface with a 0.40 - 0.50 kg/m<sup>2</sup> of single-layer GRADA PURFLEX 926 aliphatic based polyurethane topcoat offers excellent results.

**Package:** Component A: 10 kg Component B: 0.6 kg

**Consumption:** 2 - 2.2 kg/m<sup>2</sup>

**Storage and Shelf Life:** GRADA COLD POLYUREA 2K can be stored in between + 5 °C and 25 °C if it is unpacked, 9 months from the date of production and kept away from sunlight and freezing risks.

**Priming:**

Prime very absorbent and brittle concrete or brittle cement screed surfaces with PRIMER PU 1K , PRIMER S 110, PRIMER S 120 (Humidity of the concrete should not exceed %5). Or for damp concretes PU PRIMER 2K or EPOXY PRIMER is suggested for moisture barrier. Prime non-absorbent surfaces like metal, ceramic tiles and old

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coatings with PU PRIMER. Apply the material with roller or brush in minimum two, coats. Do not exceed 48 hours between each coats.

**Technical Data**

QUALITY (23°C, 50% RH )	VALUE	STANDARD & METHOD
Appearance	Component A: Liquid, Red Component B: Liquid, Transparent	-
Viscosity	Component A: 2500 ± 500 Component A: 20 ± 10	EN ISO 2555
Density (gr/cm <sup>3</sup> )	Component A: 1.40 ± 0.05 Component B: 0.98 ± 0.05 Mix A + B: 1.37 ± 0.05	EN ISO 2811-1
Solid Substance by Volume (V%)	Mix A + B: 61 ± 1	EN ISO 3251
Application Thickness (mm)	2	-
Container Life (minute)	30	Mix A + B 100 gr
Touch Drying (hour)	4 - 6	at 23°C - 50% RH
Full Curing (days)	7	at 23°C - 50% RH
Elongation at Break (%)	>500	EN ISO 527 ASTM D 412
Ultimate Strength (N/mm <sup>2</sup> )	>10	EN ISO 527 ASTM D 412
Tensile Strength (N/mm <sup>2</sup> )	>4.5	EN ISO 527 ASTM D 412
Adhesion Resistance (N/mm <sup>2</sup> )	>1	EN 1542 ASTM D 4541
Surface Hardness (Shore A)	>68	EN ISO 868 ASTM D 2240

**Warnings:** Never add any other material to the product GRADA COLD POLYUREA 2K. The unpacked packages should be finished up and not be left unfinished. Do not dilute it with any diluent

**Safety Measures:** Component A of GRADA COLD POLYUREA 2K contains isocyanate. Do not smoke during the application process, and it is necessary to work in a well-ventilated environments away from bare flame. Please note that solvents are heavier than air; therefore it accumulates on the floor. During the application process, the proper work clothes, protective gloves, goggles and mask should be used pursuant to the occupational health rules. The components should not come into contact with skin and eyes due to the irritating effects of the non-cured product. Wash with plenty of water and soap in case of contact. In case of swallowing, immediately see a healthcare professional. For detailed information, please apply to Safety Information Form (MSDS) or get in contact with our technical departments. Keep out of reach of children.