

## TECHNICAL DATA SHEET

**Item number:** 0803-433-XXXX

**Product name:** ALMACOAT PROTECT

## ALMACOAT PROTECT

**Description:** Spray applied polyurea-polyurethane hydro-insulation coating.

ALMACOAT PROTECT is high quality two-component solvent-free coating used on metal surfaces (steel, aluminum), concrete (or other cement based and construction), wood or polyurethane thermal insulations. ALMACOAT PROTECT is universal seamless coating that cures fast ideal for places where protection against water and water vapor is required. It also exhibits very high mechanical resistance.

### RECOMMENDED USE

ALMACOAT PROTECT coating is recommended for interior and exterior use. It will serve best as hydro-insulation on foundations, basements, balconies, terraces, green roofs. It is also recommended as repair system for bituminous roof coverings (tar-board), overflow tanks and geofabric. ALMACOAT PROTECT coating is not UV resistant, therefore when used on buildings subject to UV exposure it is necessary to protect it with an appropriate coating.

### TECHNICAL PROPERTIES

#### Product characteristics (part A-ISO and B-Polyol)

	Standard value	Method
Viscosity – part A, B (25°C)	1000 mPas, 650 mPas	EN ISO 2555 (Brookfield)
VOC	0%	-
Density – part A, B (25°C)	1.13 g/cm <sup>3</sup> , 1.05 g/cm <sup>3</sup>	EN ISO 1675
Gelation time (18°C)	20-25 seconds	-
Dry-to-touch (18°C)	60-70 seconds	-
Dry time (18°C)	20-25 minutes	-
Recoat window	25 minutes to 24 hours	-
Mixing ratio	1:1 (by volume)	-
Recommended thickness	1.5 – 2.0 mm	-
Coverage	Approx. 1.1 kg/m <sup>2</sup> at 1mm thickness	-

## Physical properties of the coating at 2mm

	Standard value	Method
Stretch resistance after 24h	12.6 Mpa	EN ISO 527
Break elongation after 24h	490%	EN ISO 527
Stretch resistance (max)	19.5 Mpa	EN ISO 527
Break elongation (max)	495%	EN ISO 527
Surface adhesion (steel)	>5 Mpa	EN ISO 4624
Surface adhesion (concrete)	Break in concrete	EN 1542
Shore hardness	95A, 40D	EN ISO 868
Bridging cracks 3.2 mm	>50 m H <sub>2</sub> O pole.	ASTM D5385
Water absorptivity	-	-

## INSTALLATION

ALMACOAT PROTECT coating must be applied on properly prepared vertical and horizontal surfaces. Concrete surfaces must be clean, free from dust, oil, grease, fluid bituminous substances and detergents. Concrete humidity must not exceed 5%. When applied on new concrete surfaces lime milk should be removed by sandblasting or water blasting. Steel surfaces must be degreased and mechanically cleaned (to Sa ½ cleanliness degree). Concrete surfaces (or other cement based) must be primed with two-component epoxy primer. It is recommended to use one or two-component polyurethane primer on steel surfaces. Fluid hydro-insulation ALMACOAT PROTECT is available in 1.5 kg cartridges with volume mixing ratio of 1:1. Thickness of hydro-insulation coating is arbitrary (from 0.5mm to a couple of centimeters) and depends from the requirements of the coating. In most cases 1.5-2.0mm thickness is sufficient to provide good hydro-insulation as well as mechanical and chemical resistance. ALMACOAT PROTECT coating (summer version) should be applied with conventional sprayer at temperatures ranging from 5° to 35°C. Surface temperature should be 3°C higher than dew point. Prolonged reaction time of ALMACOAT PROTECT allows to stop the spray for approx. 5-6 seconds without the need of exchanging static mixer. ALMACOAT PROTECT can be used on vertical surfaces. ALMACOAT PROTECT spills can be cleaned with commercial polyurethane solvents (e.g. xylene). ALMACOAT PROTECT is aromatic coating and it is not UV resistant (it will change color or/and fade). Please contact manufacturer before applying on a surface subject to UV.

### Chemical agents resistance

ALMACOAT PROTECT hydro-insulation is resistant to diluted lye, acids, alcohol, detergents, fuel and other petroleum products. Please contact manufacturer regarding other chemical agents.

### Storage

Store in temperatures from 10°C to 35°C. When storing in temperature below 10°C isocyanate ingredient can crystallize! When solids are noticed in the product it must be heated to 40-50°C for 24h. Store the cartridges in horizontal position. It allows to mix the polyol part pigments more easily as it may sediment during storage.

## Safety

Please refer to product label and MSDS's before using ALMACOAT PROTECT. When using ALMACOAT PROTECT wear protective clothing, goggles and a mask (A1P2 filter type)

**SHELF LIFE:** 3 months from the production date in original unsealed container.

**WARNING!** This product is designed for professional use in the given industry. Detailed information regarding product safety can be found in the MSDS.