



DESCRIPTION

KAR POL BMP 10 2K is a polyurethane-bitumen based, two-component waterproofing membrane with fast curing properties, permanent flexibility, Root-resistant, and high elasticity. It is applied cold and does not require heating or thinning before use. The product provides excellent adhesion to almost all types of substrates and is primarily designed for below-ground waterproofing applications such as foundations, retaining walls, basements, and structures exposed to seepage water, temporary water pressure, and permanent hydrostatic pressure. It can be used in terraces, balconies, roofs, kitchens, bathrooms, and other dry or slightly damp areas. Suitable substrates include concrete, stone, brick, block, plaster, and screed surfaces. When reinforced with 100 g/m² polyester felt, it can be used in pressurized waterproofing systems, large surface areas, and transition zones between different materials. It is also suitable for water tanks (excluding potable water tanks), water channels, gypsum and cement-based panels, old asphalt membranes, and EPDM surfaces. The product is suitable for planter boxes and green roof systems. Thanks to its easy-to-apply consistency, it ensures reliable waterproofing even in complex details and difficult surfaces. It offers excellent resistance to water ponding, freeze-thaw cycles, detergents, oils, seawater, and common household chemicals. The material can be applied using a brush, roller, or airless spray equipment. It maintains its elasticity even at low temperatures and provides excellent crack-bridging performance. The product contains solvents and is free of chloride ions.

PRODUCT FEATURES	AREAS OF USE
- Polyurethane-bitumen based formulation - Suitable for planter boxes and green roof systems - Excellent adhesion strength - Outstanding elasticity - Retains flexibility even at low temperatures - Applicable by brush, roller, or airless spray equipment - Superior crack-bridging capability - High resistance to seawater, oils, and detergents - Chloride-free formulation - Reduces labor and application time	Suitable for properly prepared surfaces in: - Foundations - Reinforced concrete retaining walls - Curtain walls - Tunnels - Dams - Reinforced concrete terrace roofs - Galleries and drainage systems - Wet areas such as bathrooms, showers, and toilets - Bridges - Parking structures - Surfaces exposed to pressurized and non-pressurized water - Areas affected by ground moisture and seepage water ready to use. Always follow the application instructions during use. For applications not listed above, please consult our technical department.

IMPORTANT NOTICE

Item	Value
Applicable Standard	EN 14891
Product Class	RMP01
Certificate Number	007446-TSE-04/05
System Type	Waterproofing Membrane

PACKAGING DETAILS

20 kg set total

- **Component A:** 10 kg of metal pail
- **Component B:** 10 kg of metal pail

CLEANING INSTRUCTIONS

- Fresh spills must be cleaned immediately with water before curing.
- All application tools (trowels, rollers, brushes, mixing equipment) should be cleaned with water immediately after use.
- Larger spills should be absorbed using inert absorbent material and disposed of properly.
- Cured material can only be removed by mechanical means.
- Contaminated waste must be disposed of in accordance with local regulations.

TECHNICAL INFORMATION

Property	Value
Application Temperature	+8°C to +30°C
Pot Life (Working Time)	35 minutes at 20°C
Full Curing Time	24 hours at 20°C
Recoat Interval	5 hours
Trafficability (Walkable)	24–36 hours
Shore Hardness	85 (ASTM C836)
Moisture Tolerance	up to 4%
Density	1.10 ± 0.05 kg/L
Adhesion Strength	≥ 2.50 N/mm ²

pH Value	9.5 ± 1
Chemical Base	Bitumen–Polyurethane
Water Vapour Permeability	Class I
Elongation at Break	> 1800%
Reaction to Fire	Class E
Mixing Ratio (by weight)	A : B = 1 : 1

SURFACE PREPARATION

The substrate must be structurally sound, clean, and free from dust, oil, grease, loose particles, and curing compounds. Any weak or moving sections must be repaired and stabilized before application. Surface defects and voids must be repaired using KAR Repair series mortars, and the surface should be left for 3–4 days before waterproofing. The surface must be dry; standing water and ponding must be removed. Sharp edges and corners should be rounded. A minimum 5 cm cementitious fillet (cove) must be applied at corners and joints. Surface irregularities must be leveled using a mortar mixed with siliceous sand in primer. Holes larger than 5 mm and tie rod holes must be filled with appropriate repair mortars. Negative side water pressure areas (water seepage, vapor, salt efflorescence) are not suitable for application. Extremely dense concrete surfaces should be mechanically roughened to improve adhesion. Expansion joints must not be sealed; the system must be integrated properly with joint materials. Maximum substrate moisture content must not exceed 4%. Application should be avoided at relative humidity above 75% or temperatures above 35°C.

PRODUCT APPLICATION

Personal protective equipment (PPE) such as protective clothing, gloves, and goggles must be worn during application. The product is supplied ready to use in pre-weighed A and B components (20 kg set total). Pour component B into component A and mix thoroughly until a homogeneous mixture is obtained. Minimum mixing time is 3 minutes. Apply using a stiff brush, roller, or airless spray machine. After the first coat has cured sufficiently, apply the second coat perpendicular to the first. Minimum recoat time is 5 hours (until surface is tack-free to touch). Reinforcement (polyester fleece or glass fiber mesh) may be used between layers if required.

APPLICATION NOTES

Do not add any foreign materials such as lime, cement, or gypsum. Application temperature must be between +8°C and +30°C. Do not apply on frozen, melting, or frost-affected surfaces (within 24 hours of frost risk). Do not apply under direct sunlight, strong wind, or on overheated surfaces. The application area must be protected from airflow; doors and windows should remain closed where possible. The product must be applied in two coats with primer. Recommended primers include KAR Floor EP 101, EP 102, or EP 103. Primer consumption: 200–400 g/m². Waterproofing must be applied 4 to 48 hours after primer application. If more than 24 hours pass, the primer must be sanded. The product is not UV resistant; therefore, it must be protected after application with insulation boards, protection boards, or geotextile layers. Do not dilute

the product under any circumstances. Protect the applied surface from direct sunlight, wind, and high temperatures (>35°C). Tools must be cleaned immediately with solvents before curing; once hardened, mechanical removal is required.

PRODUCT LIMITATIONS

- The product is not resistant to acids.
- Do not use it in areas exposed to continuous high heat.
- Do not add water to the product.
- Do not apply during rainfall or wet weather conditions.
- Maximum service temperature: 80°C
- Maximum thermal shock resistance: 200°C
- The cured film remains flexible down to -40°C
- Substrate must have a minimum compressive strength of $R28 \geq 15 \text{ MPa}$
- Substrate relative humidity must be below 85%
- Application temperature must be between 5°C and 35°C
- Contains low levels of volatile flammable solvents; smoking and open flames are strictly prohibited during application.
- Application must be performed in well-ventilated areas with appropriate respiratory protection.
- Component A is a resin-based curing agent and must be tightly sealed when not in use and stored away from direct sunlight.
- Component B is bitumen-based; it has a flash point below 40°C and must be stored in a cool, shaded environment away from heat sources.
- The mixed material must be used immediately after preparation.
- Do not dilute under normal conditions. If necessary, approved solvents such as xylene, toluene, or PMA may be used, but performance properties may change.
- Curing time is temperature-dependent: low temperatures slow down curing, while high temperatures accelerate it.

CONSUMPTION – SHELF LIFE – STORAGE

- To obtain a dry film thickness of 1.7–2.0 mm, approximately 1.1–1.8 kg/m² of product should be applied. Shelf Life: The product should be stored in its original packaging in a dry environment between +5°C and +30°C. In unopened packaging, it has a shelf life of at least 12 months when stored in a cool, dry, and covered area. Containers should be tightly sealed when not in use.

SAFETY & PRECAUTIONS

Avoid prolonged skin contact and inhalation of vapors, mist, or spray. Causes eye irritation. Use only in well-ventilated areas. Ensure fresh air circulation during application and curing. If dizziness, headache, or symptoms of overexposure occur, use an approved (CE-certified) respirator. Avoid contact with eyes, skin, and clothing. Wear chemical-resistant safety goggles or face shield. Wash hands thoroughly with soap and water after handling. Do not eat, drink, or smoke while handling the product. Keep containers tightly closed after each use.

FIRST AID

- **Skin contact:** Wash thoroughly with soap and water.
- **Eye contact:** Rinse immediately with plenty of water for at least 15 minutes and seek medical attention.
- **Inhalation:** Move to fresh air; seek medical help if symptoms persist.
- **Ingestion:** Do not induce vomiting; seek immediate medical attention.

WARRANTY & DISCLAIMER

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