

Bituma 1 K is a ready-to-use, single-component, elastic, waterproof, bitumen-based, polymer and rubber-modified, long-lasting liquid insulation material.

■ Fields of Application

- Foundations, basements, retaining walls
- Curtains and all reinforced concrete surfaces in contact with soil

■ Advantages

- Ready to use, can be easily applied with a brush, roller, or spray gun.
- Does not shine or catch fire as it is solvent-free.
- Being water-based, the product can be thinned with water and used as a primer.
- Bridges shrinkage cracks.
- Resistant to plant roots due to its bituminous content.
- Maintains elasticity at low temperatures.

1 Preparation of Substrate

The surface to be applied should be free of oil, dirt, rust, and all loose materials, and if necessary, the surfaces should be cleaned with a water jet. The surface to be applied must have sufficient strength. Wide cracks and tie rod holes on the cleaned surface are filled with Merks Repair Plus series repair mortars. Corner joints should be rounded with fillets.

2 Application

Bituma 1 K should be thoroughly mixed before use. It can be applied with a brush, roller, or suitable airless spray machines. Generally, excellent results are achieved with an application thickness of 1.5 mm. This thickness should be achieved with two coats.

3 Consumption Rate

Consumption is approximately 1.5–2 kg/m² (for 1 mm thickness).

4 Points to Consider

- Application should be done on the surface exposed to positive water pressure.
- During application, the air should be dry and the temperature should be above +5°C, and the second coat should be applied perpendicular (90°) to the previous coat using a brush, roller, or sprayer.
- The material should be protected from freezing, and any product that has frozen should not be used as it will lose its properties once thawed.
- The applied surfaces of the retaining wall insulation should be protected with XPS and drainage boards.
- Bituma 1 K should not be preferred for water tank and pool insulations. For such details, Sealmax series products should be preferred.
- After finishing the job, tools should be cleaned with water.

5 Packaging

In 17 – 30 kg plastic buckets.

6 Storage Life

At least 12 months in sealed packaging and protected from freezing.



TECHNICAL DATAS

PRODUCT FEATURES

Appearance	Liquid
Color	Brown – Turns Black When Cured
Density (g/cm ³): A / A+B	1.15 g/cm ³ (±0.04)
pH	11 (±1)
Viscosity - Brookfield (mPa·s):	4500 (rotor 6 - 60 RPM)*
Solid Content Ratio (A) (%)	% 65 (±4)
Packaging Content	17 kg
Application Temperature	+5°C / 30°C
Service Temperature	-20 °C / 80 °C

Main Characteristic	Method	Performance Value According to TS EN 15814	Performans Değeri
Crack Bridging (+4°C)	EN 15812	Class CB0: no requirement Class CB1: 1 mm crack bridging at 3 mm thickness Class CB2: 2 mm crack bridging at 3 mm thickness	CB2
Water Resistance	EN 15817	1. No color change in water. 2. No separation from the mesh in mesh-reinforced application.	PASS
Flexibility at Low Temperature (0°C)	EN 15813	No cracking	PASS
Dimensional Stability at High Temperature (70°C)	EN 15818	No flow or slip	PASS
Reduction in Thickness After Full Curing	EN 15819	≤ 50%	≈ 35%
Reaction to Fire	EN 13501-1	Euroclass	E
Water Impermeability (1 mm crack)	EN 15820	Class W1: ≥ 24 hours at 0.0075 N/mm ² pressure, dry film thickness without mesh reinforcement ≥ 3 mm Class W2A: ≥ 72 hours at 0.075 N/mm ² pressure, dry film thickness with mesh reinforcement ≥ 4 mm Class W2B: ≥ 24 hours at 0.075 N/mm ² pressure, dry film thickness without mesh reinforcement ≥ 4 mm	W1
Rain Resistance (23°C, 50%)	EN 15816	Class R1: Up to 24 hours Class R2: Up to 8 hours Class R3: Up to 4 hours	R1

*Production viscosity; may increase over time.