

# TECHNICAL SHEET

## Cationic polymer modified bitumen emulsion HB 60 K-PM

### Cationic rapid setting polymer modified bitumen emulsion

**Product description** Cationic polymer modified bitumen emulsion HB 60 K-PM is a dark brown liquid consisting of polymer bitumen emulsified in an aqueous solution of a cationic emulsifier.

**Characteristics of the product** Cationic polymer modified bitumen emulsion HB 60 K-PM is a dispersion system consisting of polymer bitumen, which is mechanically dispersed in the form of fine particles in water with the help of an emulsifier. Due to the positive electrostatic charge, it is a cationic bitumen emulsion. Due to its specific disintegration rate, it is a rapid setting bitumen emulsion. When it breaks down, it reacts with aggregate and revert from the emulsion to the polymer bitumen.

Characteristic	EN Method	Unit	Value
Perceptible properties	1425	/	dark brown liquid
Particle polarity	1430	/	positive
Bituminous binder content	1428	%	58 – 62 (class 6)
Efflux time by the efflux viscometer (d=4 mm, T= 40°C)	12846	s	5 - 50 (class 5)
pH value	12850	/	< 7
Breaking properties	13075-1	/	70 – 155 (class 3)
Homogeneity – residue on sieving 0,5 mm	1429	%	≤ 0,5 (class 4)
Storage stability by sieving (7day storage) – residue on sieving 0,5 mm	1429	%	≤ 0,5 (class 4)
Adhesivity of bituminous emulsions	13614	%	≥ 90 (class 3)
Recovered binder - penetration at 25°C	13074-1/1426	1/10mm	≤ 220 (class 5)
Recovered binder - softening point	13074-1/1427	°C	≥ 39 (class 7)
Recovered binder - elastic recovery	13074-1/13398	%	≥ 50 (class 5)
Recovered binder - tensile properties of modified bitumen by the force ductility at 10°C	13074-1/ 13589/13703	J/cm <sup>2</sup>	≥ 0,5 (class 7)
Recovered binder - cohesion of bituminous binders with pendulum test	13074-1/ 13588	J/cm <sup>2</sup>	≥ 0,7 (class 5)
Recovered, stabilized and aged binder - penetration at 25°C	13074-1/ 14769/1426	1/10mm	* NPD (class 0)
Recovered, stabilized and aged binder – softening point	13074-1/ 14769/1427	°C	* NPD (class 0)
Recovered, stabilized and aged binder - elastic recovery	13074-1/ 14769/13398	%	* NPD (class 0)
Recovered, stabilized and aged binder - tensile properties of modified bitumen by the force ductility at 10°C	13074-1/ 14769/13398/ 13589/13703	J/cm <sup>2</sup>	* NPD (class 0)
Recovered, stabilized and aged binder - cohesion of bituminous binders with pendulum test	13074-1/ 14769/13588	J/cm <sup>2</sup>	* NPD (class 0)

\* NPD – no performance determined

## Use and installation

**Cationic polymer modified bitumen emulsion HB 60 K-PM** is used for tack coat (also known as the bond coat). It is a light application of asphalt emulsion between hot mix asphalt layers designed to create a strong adhesive bond without slippage. It is used on pavements with higher traffic loads. The product is applied by spraying with a bitumen emulsion spraying device. Usually, tankers of various volumes are used as a storage for emulsion, on which a spraying device is installed. For smaller areas, it is also sprayed with manual sprayers. Before use, it is important that the bitumen emulsion is homogeneous, especially if it is stored in metal barrels, so it is necessary to mix the contents before use. The emulsion can be heated to a maximum of 50°C for easier spraying. The consumption of emulsion is prescribed in the project by the investor for each building separately. At work, we use the necessary personal protective equipment to protect workers (protective clothing, gloves, footwear, glasses).

## Storage

**Cationic polymer modified bitumen emulsion HB 60 K-PM** is delivered in tanker trucks of various volumes, which are equipped with a device for spraying bitumen emulsion. We also deliver it in metal barrels of 200 kg, placed on wooden pallets. The emulsion must be stored at a temperature above +5°C. It is recommended to mix the emulsion at least once a week (roll the barrels in one and the other direction). PERIOD OF USE: at least 60 days from production date.

## Disposal considerations of waste

The product must not be discharged into waterways or sewers. Absorb the spilled area with sand or sawdust. For the removal of waste of product and packaging, it is necessary to follow the valid local environmental regulations.

Waste classification: 17 03 02 bituminous mixtures other than those mentioned in 17 03 01.

Waste packaging: 15 01 04 metallic packaging, 15 01 03 wooden packaging.



The product is in conformity with **EN 13808:2013 type C60 BP3**.

The system of quality and handling of the environment is conforming with EN ISO 9001 and EN ISO 14001