

Eurolan® 3 K

High-concentrated and alkali-resistant bitumen emulsion

With official test certificates and DIN 18156, Part 4 (FRG)
Corresponds to AIB specifications (FRG)

Description

EUROLAN 3 K is a solvent-free, very finely dispersed bitumen emulsion with a high bitumen content of 60 %. It is suitable for dry and damp surfaces. When used as a coating, it dries to give a glossy black, enamel-like finish.

Main properties:

- Absolutely compatible with cement and lime; allowing the addition of a high percentage of bitumen for the mixing of cement screeds and rendering mortars
- Plasticising effect, which largely reduces the water/cement ratio of plasters and mortars and improves their workability
- Resistant to many acids and alkalis.

Product data

Base	bitumen emulsion
Solvent	none
Colour	black
Consistency	liquid
Density	appr. 1.0 g/dm ³
Dry residue	appr. 60 %
Application	brush, broom, roller spray,
Consumption	depends on the application
Drying time	about 2 hours
Application temperature	above + 4 °C
Vapour diffusion resistance factor	μ _{H₂O} appr. 800
Clean-up	water, when fresh; thinner T, when dry
Thinner	water

Range of application

The many positive properties of EUROLAN 3 K make possible a wide range of application. It is convenient as:

1. Primer for our bitumen waterproofing compounds: EUROLAN 3 DM,

SUPERFLEX 10, 100, 100 S and PLASTIKOL UDM 2/2 S

2. Waterproof and protective coating below ground level for concrete, render, masonry, iron, asbestos cement, cork and all kinds of insulation boards which are sensitive to solvents. Suitable as coating in tunnel constructions and mining or for foundations, whenever the ground water shows aggressive characteristics
3. Roof protective coating
4. Primer on metal roofs
5. Additive for bitumen, watertight render for interior and exterior use.
6. Waterproof coating for facades exposed to driving rain before the facing brickwork is fixed (the brickwork must be secured to the wall with anchors)
7. Additive for bituminous mortars in underground structures, such as tunnels and shafts in civil engineering projects.

Watchpoints

Do not apply EUROLAN 3 K to frozen surfaces. Zinc and aluminium should not be coated with EUROLAN 3 K. Strong sunlight and dry surfaces should be avoided whenever EUROLAN 3 K is used as additive for mortar. Renderings and screeds should be therefore protected with damp sacking when application occurs in heated rooms or at temperatures over + 28 °C.

Working instructions

1. As primer for the bitumen waterproofing compounds

Dilute EUROLAN 3 K with water (1 : 10 parts by volume) and apply by brush, broom, roller or spray. Consumption: appr. 50 - 80 ml/m². For SUPERFLEX 100 S the ratio is 1 : 10 - 1 : 15. Apply the primer onto a clean substrate.

2. As protective and waterproof coating below ground level

EUROLAN 3 K can be applied to dry or damp surfaces. Application by brush for small areas or by broom or roller for large areas. The coating

should be dry before the onset of rain. The drying time depends on the weather; the emulsion dries within a few minutes when the weather is hot, dry and windy or within several hours in the event of cold and rainy weather. Take care of a good ventilation when working in closed and damp reservoirs.

Prime dry and absorbent surfaces with EUROLAN 3 K diluted by water (30 - 70 %). Two top coats of undiluted EUROLAN 3 K are applied after the primer is dry.

All masonry joints must be tight. Concrete surfaces must be grinded off. Absorbent surfaces must receive a cement mortar layer. Each type of surface has to be levelled out, but not smoothed.

Waterproofed walls should not be backfilled before EUROLAN 3 K has not thoroughly dried. Use only sandy backfilling material. Dilute EUROLAN 3 K with 10 - 20 % water, if applied with spray.

Minimal consumption of EUROLAN 3 K: 200 - 250 g/m²/coat.

Clean tools with water after use.

3. As roof protective coating

Thorough preparation of the surface (concrete or bitumen roofing felt). Minimum roof inclination: 5 %.

Apply a priming coat: 1 part by volume EUROLAN 3 K and 1 - 3 parts by water. It is essential to apply a priming coat of highly diluted emulsion before treating old bitumen roofs with bonded chippings.

Apply EUROLAN 3 K undiluted after the primer has dried.

Consumption of EUROLAN 3 K: 200 - 250 g/m²/coat on concrete.

4. As primer for metal roofs

Not convenient for holed metal roofs. Mix 1 part by volume EUROLAN 3 K with 3 parts by volume water.

5. As additive for watertight render or screed mortars

5.1. Interior waterproofing of basements or walls (below garde), tunnels, shafts etc.

Clean the surfaces. Cement-powdered surfaces should either be roughened or chipped off.

Apply the following throw-on mix on smooth surfaces:

- 1 part by vol. cement
- 2 parts by vol. sharp sand (0 – 4 mm)
- 1 part by vol. EUROLAN HL
- 3 parts by vol. water.

Consumption of EUROLAN HL: 150 – 200 g/m².

Mixing ratio for render mortar:

- 1 part by vol. cement
- 2.5 parts by vol. sharp sand (0 – 4 mm)
- EUROLAN 3 K diluted with water (1:9 to 1:4 by volume)
- Use CERINOL ST or CERINOL BDS to waterproof leaky surfaces or seepage (refer to the data sheets).

Mixing ratio for screed mortar:

- 1 part by vol. cement
- 3 – 3.5 parts by vol. sand (0 – 8 mm)
- 1 part by vol. EUROLAN 3 K
- 6 parts by vol. water.

In the case of application to smooth surfaces a mix with EUROLAN HL should first be prepared; this mix is not applied like a throw-on plaster but brushed well with a stiff broom into the clean and dry floor. The screed mortar is laid immediately after the render has begun its setting

The screed should shortly be laid after the last layer of bitumen plaster mortar has been applied. Form grooves between wall and floor, so as to obtain a seamless connection.

Consumption of EUROLAN 3 K:

- either 20 kg EUROLAN 3 K per m³ mortar
i.e. 10 kg EUROLAN 3 K and 90 litres water
or

- 40 kg EUROLAN 3 K per m³ mortar i.e.
20 kg EUROLAN 3 K and 80 litres water.

5.2. Exterior waterproofing of basements or walls (below ground level), tunnels, shafts or brickwork, which are subject to pressure water

Dry mix:	1 part by vol. cement 2.5 parts by vol. sand (0 – 4 mm)
Gauging water	10 – 20 % EUROLAN 3 K are added to water (1:9 to 1:4 parts by volume)

Apply the rendering mortar. Do not wait until the mortar has set and apply a coat of undiluted EUROLAN 3 K. Apply a second coat after 24 hours.

The backfilling should occur after EUROLAN 3 K has fully dried. Use only sandy material near the waterproofed surfaces.

This type of waterproofing is also suitable for walls exposed to driving rain; whenever they are subsequently to be faced with brick, but not with unkeyed facings. Panels should therefore not be fixed directly to EUROLAN 3 K mortar (see section 5).

6. As waterproof coating for facade

Apply a bitumen render mortar to facades before facing. Do not apply to unanchored facing, since panels should not be fixed directly to EUROLAN 3 K mortar. See section 5.2 (above) for the mixing ratio. Care must be taken to ensure a good, watertight groove at ground level above the basement. The bituminous rendering and the EUROLAN 3 K coating also ensure a good seal around the anchors. EUROLAN 3 K offers good protection against corrosion. Surfaces treated in this way are also resistant to the effects of driving rain. However, this insulation does not form a vapour barrier, since the setting and drying of the bitumen emulsion necessarily promotes vapour formation. The structure is completely sealed against the penetration of moisture from the outside, but it can still „breathe“ outwards from the inside

7. As additive for bitumen masonry mortars in underground structures

Dry mix:	1 part by vol. cement 2.5 parts by vol. sand (0 - 4 mm)
Gauging water	5 - 20 % of EUROLAN 3 K (depending on the degree of water penetration).

This bitumen mortar will not segregate and has a good workability. Care should be taken that the bricks are laid without any gaps in the joints. A watertight brickwork is obtained with the bituminous mortar described in section 4 (above).

Consumption:	10 - 40 kg EUROLAN 3 K per m ³ mortar.
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Delivery and storage

EUROLAN 3 K is available in black in 5 l, 10 l and 32 l containers and 205 l drums (net contents).

Can be stored dry, frost-free in its original sealed packing for at least 12 months.

Notes

The correct and hence successful application of our products is not within our control. A guarantee can therefore only be accepted for the quality of our products within the framework of our sale and supply conditions but not for their successful use.

Observe the safety precautions for protection of health and prevention of accidents given in the safety data sheet and on the label of the packaging.

This data sheet supersedes all earlier technical data on this product. Information supplied by our employees and/or distributors going beyond the information contained in this data sheet, must be confirmed in writing.

We reserve the right to make changes representing technical progress.

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