



# Corestone

## Penetrator AQ-N

### Product description

EPI Corestone Penetrator AQ-N is a waterborne, fast-drying, 2-component, solvent- and nonylphenol-free epoxy resin that can be used as a primer or impregnating application on existing coatings, tiles and porous and highly absorbent substrates. EPI Corestone Penetrator AQ-N can optionally be scattered with a fine infill material such as clean, fire-dried quartz sand

### Product features

- Fast-curing material
- Easy to apply
- Good adhesion properties to tiles
- Good intercoat adhesion properties
- Damp-open
- Odorless

### Application areas

#### Primer

EPI Corestone Penetrator AQ-N can be used as low viscous primer application on porous mineral surfaces such as concrete and sable-cement screeds.

#### Scratch coat

EPI Corestone Penetrator AQ-N can be used as low viscous primer in combination with EPI Primer 400 POX as scratch coat.

### Theoretical coverage

#### Application as Primer

EPI Corestone Penetrator AQ-N

Usage: approx. 150 - 250 gr/m<sup>2</sup> depending on the roughness of the substrate.

### Packaging

EPI Corestone Penetrator AQ-N is available in the following packaging unit;

EPI Corestone Penetrator AQ-N, set 12 kg;

- |                            |   |         |
|----------------------------|---|---------|
| Penetrator AQ-N, comp. A   | : | 2.0 kg  |
| ▪ Penetrator AQ-N, comp. B | : | 10.0 kg |

### Technical Information

Density	~ 1,30 gr/cm <sup>3</sup>
Pull-off strength	≥ 1.5 N/mm <sup>2</sup>
VOC content, EU limit cat. A/j	≤ 140 g/l
Giscode	RE 20
Solids	approx. 80% weight
Mixing ratio	comp. A : B = 20 : 100
General application conditions	Material-, substrate-, and ambient temperatures between 15°C and 25°C and at least 3°C above dew point.
Optimal installation conditions	Material-, substrate-, and ambient temperatures between 18°C and 22°C
Relative humidity	Maximum 65% RH
Application time	40 - 50 minutes at 20° C and 65% RH
Touch dry	After approx. 2-3 hrs at 20°C and 65% RH
Re-coat window	After approx. 3 hrs with epoxy products and after approx. 12 hrs with polyurethane products
Foot traffic	After approx. 3 hrs at 20°C and 65% RH.

**Note:** The above physical properties were measured in accordance with the referenced standards. Samples of the actual floor system, including binder and filler, were used as test specimens. All sample preparation and testing is conducted in a laboratory environment, values obtained on field applied materials may vary.



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### Substrate preparation

In general, the substrate must comply with relevant standards with special attention to flatness, slopes, thickness, bearing capacity and water permeability. The substrate must be flat, permanently dimensionally stable, free of cracks, dry and free of contaminants that may have a detaching effect such as dirt, oil, grease, coating materials and other surface treatments. The tensile strength should be at least 1.5 N/mm<sup>2</sup> and the compressive strength should be at least 25 N/mm<sup>2</sup>. Existing expansion joints in the surface shall be adopted. Dimensions and details of these joints will be determined based on the expected joint movements. Depending on the substrate, mechanical preparation (vacuum blasting, milling and/or diamond sanding) is recommended for good adhesion.

### Residual Moisture tolerance

Prior to installation, mineral substrates must always be provided with a vapor barrier and must not exceed 4 % decreasing residual moisture content measured by the Calcium Carbide method, which corresponds to maximum 75% relative humidity according to ASTM F2170. If using the calcium chloride test, the maximum allowable vapour emissions is 4.0 lbs as per ASTM F1869. For anhydrite substrates must not exceed 0,5% decreasing residual moisture content measure by the Carbide method.

### Limit processing conditions

No rising moisture in accordance with ASTM (polyethylene foil). The temperature of the substrate and not cured material must be at least 3°C higher than the dew point to prevent the risk of condensation, white discoloration or sticking of the floor finishing layer. At temperatures <10°C, the exothermal reaction will greatly slow down and exposed to changed humidity % for a longer period, which can cause white discoloration and carbamate formation.

### Work Safety Precautions

Before using the products, the user must read the associated, current Material Safety Data Sheets (MSDS). The MSDS provides information and instructions for the safe use, handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety related data.

Please refer to the Material Safety Data Sheets for detailed safety instructions for use of the use of personal protective equipment during the processing of the materials. The Safety Data Sheet EPI Corestone Penetrator AQ-N applies to the components A and B. These sheets have been drawn up in accordance with the latest European legislation.

### Application of Corestone Penetrator AQ-N

#### General:

- Before installation, always check all relevant documentation and check that all components are present in the required quantities.
- Large temperature differences should be avoided as this can adversely affect the end result.
- The area must be wind and watertight: avoid drafts and penetration of moisture, dust, water, etc..
- Preferably remove doors that have no free space. Protect walls, columns and walls from splashes.
- Retain the floating character of floating screeds. (e.g placing edge strips)

### Application Corestone Penetrator AQ-N

- Always mix complete units!
- If the application time, project size and mixing equipment allows, double sets may be used.
- **Step 1:** Mix components A and B carefully with each for approx. 2 minutes to an uniform homogeneous material, with attention to mixing on the bottom and on the edges.
- Pour the mixed mixture into a clean bucket and depending on the need, then add up to 30% water and mix again for 1 minute until uniformly mixed.
- **Step 2:** Pour the material onto the floor immediately after mixing. The material is applied with a rubber squeegee and back-rolled with a medium nap roller, this improves levelling of the material and removes possible squeegee lines.
- Use clean spike shoes or golf shoes if desired and necessary. (Note: never walk through broadcasted floors!)

Note: Beware of condensation or other early moisture exposure! Low temperatures and high humidity increase the risk of white discoloration or carbamate formation (sticky surface).



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### Transport and storage conditions

Store all components in closed packaging, away from the ground. Temperature between +15°C and 25°C. Dry room, avoid direct sunlight. Protect liquid components against frost (also during transport).

### Shelf life

Component A : 4 months from production date.  
Component B : 4 months from production date.

### Cleaning of tools

Clean all tools and equipment immediately after use with scouring pads and warm, soapy water or mineral spirits. Cured material will require mechanical means of removal.

### Waste

Attention! Too much residual material in the packaging can become hot due to an exothermic reaction and cause smoke nuisance. Therefore never leave more than 100 grams of mixed product in the packaging and place the packaging in a safe and well-ventilated place. If there is more residual material, add a generous amount of sand to inhibit the exothermic reaction.

### CE-marking

The harmonized European standard EN-13813:2002 applies to this synthetic resin flooring material, please refer to the Declaration of Performance for more information.

### VOC / directive 2004/42/EC

EU-limit value for the product (category A/j -Type Wb) in ready-to-use condition: max. 140 g/l (2010) This product contains <140 g/l VOC.

#### EPI Corestone Penetrator AQ-N, revision date 06/09/2023

EPI Synthetic Surface Materials B.V. applies the quality control system in conformity with NEN- ISO 9001 / 14001. This means that the products delivered meet the product and quality specifications of this system. Advice given by us with regard to the technical application, whether orally, in writing, or by means of tests, is given to our best knowledge, however without obligation, also with regard to possible protected rights of third parties. This does not relieve the applicator/ user of the obligation to check the products supplied by us as to their suitability for the envisaged aims. The application, use and wear of the products take place beyond our control. Therefore they are your own responsibility. For all claims our own responsibility will be limited to the value of the goods supplied by us and used by you. It is understood that we guarantee the good quality of our products, all this in accordance with the standards referred to in our terms and conditions of sale and supply. All orders are executed under the latest terms and conditions of sale and supply. Users must always consult the latest edition of the product and material safety data sheet before using the relevant product. Copies hereof are made available upon request. EPI Synthetic Surface Materials B.V. retains the right to alter product specifications and product properties.