

Technical Instruction Sheet

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Characteristics:

AKEMI® Protector is a ready for use product based on in solvent soluted monomere and oligomere silanes/siloxanes. The product is absorbed by the capillary forces of the stone and can therefore penetrate into the stone structure. A polysiloxan results from the catalytic reaction. In addition, a reaction with the silicate substance of the stone takes place which results in high efficiency for several years. The product is distinguished by the following qualities:

- extreme reduction of water and dirt absorption during periods of moisture
- rapid liberation of humidity during dry periods due to high vapour diffusibility
- maintenance of breathing properties because there is no surface layer
- resistance to UV radiation
- the colour of the stone is normally not enhanced (preliminary test)

Field of Application:

AKEMI® Protector is suited to achieve a water and dirt repellent treatment of wall- and floor covering made of absorbent mineral substances s.a. natural and cast stone (polished ground or rough surfaces of marble, lime stone, granite, gneiss, porphyry, cotto, terrazzo, unglazed ceramic tiles or similar). The treatment is carried out before laying. The product protects from ascending humidity and against soiling resulting from humidity during the construction phase. The following cleaning of the surface will be eased and enables an after treatment with AKEMI® Stain-Repellent products.

Instructions for Use:

1. Cleaning: the surface must be clean, totally dry and free from all layers. It shall be taken into consideration that the stone contains no harmful salts (nitrates, sulphates, chlorides). Depending on the type of stone and the degree of soiling, the following products can be recommended, please pay attention to our care recommendations as well as our specification sheets: AKEMI® Stone Cleaner, AKEMI® Concrete Film Remover, AKEMI®, Rust Remover, AKEMI® Wax Stripper, AKEMI® Algae and Mildew Remover POWER, AKEMI® Oil and Grease Remover Paste, AKEMI® Graffiti-Remover. Rinse well with water without fail after cleaning. Before the stone is given its protective treatment, it must be totally dry. As a rule, this is the case after 1-2 days at the earliest.
2. Pre-test
Before starting the treatment we recommend to execute pre-tests, in order to examine the efficiency of the treatment, to evaluate the appearance of the treated surfaces (colour enhancement) and to ascertain the material consumption as exactly as possible.
3. Procedure of the treatment
 - a) The best conditions for a treatment are an object- and surrounding temperature of 15 - 25°C and a protection from direct solar radiation and humidity exposure until the effectiveness of the protective effect.
 - b) In general, a single application is sufficient.
 - c) Apply the product with a brush, paint roller or an airless spraying equipment at low pressure (max. 1 bar over pressure) and a jet distance of 5 - 10 cm (condition: tubes and seals must be resistant to solvents).
 - d) Approx. 20 minutes after application, respectively before the product has dried on the surface, any excess which has not been absorbed by the polished surface has to be completely removed with a suitable cloth, so that there remains no residue on the polished surface.
 - e) If the desired effect is not achieved or if it has been applied unevenly, an additional treatment is possible. The protective effect develops after approx. 4 – 6 hours, full efficiency is reached after approx. 4 – 7 days.
 - f) Tools can be cleaned with AKEMI® Nitro-Dilution.

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Special Hints:

- Due to the treatment with AKEMI® Protector the tensile and the bonding strength of the tile setting and joint adhesive might be affected. In case of normal wear and tear (e.g. pedestrian traffic) this will be of no importance. On surfaces, which are subject to heavy vehicle traffic, a sample area shall be layed to conduct test regarding the tensile and bonding strength.
- If the treated area is cleaned, a drying time of 1 – 2 days (depending on the temperature) is necessary.
- Unsuted or aggressive cleaning agents as well as pressure washers may destroy the protective effect and the stone.
- AKEMI® Protector is not applicable for glazed and not priming surfaces or plaster.
- Excessive product on polished surfaces causes blooming- and staining.
- Use AKEMI® Liquid Glove to protect your hands.
- Surfaces and slabs to be treated must be protected against direct solar radiation.
- Protect synthetic materials which are not resistant to solvents, window screens, parts to be varnished or objects situated in the area of working (cars, gardens) have to be protected (masked, covered).
- The colour of most stone surfaces will not or only slightly change. On quartzite and serpentine a clearly recognisable colour enhancement occurs. Therefore it is recommendable to carry out a pre test on a sample piece or an inconspicuous area.
- For adequate waste disposal container must be completely emptied.

Safety Measures:

see EC Safety Data Sheet

Technical Data:

Coverage: approx. 1 - 15 m²/litres, depending on the absorptive capacity of the stone
Colour: colourless to yellowish
Density: approx. 0.75 g/cm³
Shelf life: 1 year approx. if stored in cool place free from frost in its tightly closed original container.

Notice:

The above information is based on the latest stage of our development and application technology. Due to a multiplicity of different influencing factors, this information – as well as other oral or written technical advises – must be considered as non-binding hints. The user is obliged in each particular case to conduct performance tests, including but not limited to trails of the product, in an inconspicuous area or fabrication of a sample piece.

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