

## Technical Data Sheet

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**Properties:**

AKEMI® TOP SHIELD Transparent is a ready to use, weather resistant and non-yellowing high-performance impregnation for the professional use. The product is based on most modern organic substances which are absorbed by the capillary forces of the stone. It offers optimal protection against various staining and is distinguished by the following properties:

- excellent oil- and grease repellent effect on all surfaces (rough and polished), even applicable on critical surfaces (blasted, satin, flamed and brushed)
- very good reduction of water and dirt absorption during periods of moisture
- extensive pearl effect
- very fast development of protective effect
- generally no colour intensification on polished surfaces; on non polished surfaces a more or less intense colour deepening may occur (depending on the stone)
- for indoor and outdoor use
- tack-free hardening
- very high spreading rate
- after hardening the product is harmless to health upon contact with food products – certified by an external German testing institute

**Application Area:**

AKEMI® TOP SHIELD Transparent is used for a strong water-, grease- and oil repellent treatment of natural stones (marble, lime stone, granite, gneiss, porphyry etc.) as well as cotto, terrazzo, fine stoneware, ceramic and artificial stone (Engineered Stone). Excellently suitable for rough surfaces (ground, flamed and brushed or satin). The product is especially for kitchen counter tops, wash stands, shelves, displays, tables, window-sills.

**Instructions for Use:**

Disregarding the processing guidelines can lead to irreparable damage!

1. Cleaning:

The surface must be clean, totally dry and free from all layers. When the product is applied outdoors, the stone must not include harmful salts (nitrates, sulphates, chlorides), because they reduce the absorptive capacity of the impregnation. Depending on the type of stone and the degree of soiling, the following AKEMI® products are recommended: Stone Cleaner, Concrete Film Remover, Rust Remover, Wax Stripper, Algae and Mildew Remover, Oil and Grease Remover Paste, Graffiti-Remover. Please pay attention to the respective Technical Data Sheets. In any case, rinse well with water 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. Preparation of a sample area:

Before starting we recommend to prepare a sample area in order to examine the efficiency of the impregnation, to evaluate the appearance of the treated object (colour enhancement) and to ascertain the material consumption as exactly as possible.

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3. Impregnating procedure:

- a) Shake briefly before use. The best conditions for impregnating is a temperature of 15-25°C (surface and surrounding) and protection from rain or humidity for approx. 2-3 hours. The stone must not be warmed up by an under floor heating or direct sunlight.
- b) The impregnating effect is sufficient for fissures which are smaller than 0.3 mm.
- c) In general, one to two appliances wet-in-wet are sufficient.
- d) Apply the product with AKEMI® Impregnation Pad and evenly spread it with slight pressure. If necessary it can also be applied with a brush, cloth or spraying equipment.
- e) Approx. 20 minutes after application, respectively before drying of the impregnation on the surface, any excess which has not been absorbed by the stone has to be completely removed with a suitable cloth. Polished surfaces must additionally be polished again until any blooming on the surface is removed.
- f) If the desired effect is not achieved or if the impregnation has been applied unevenly, it is possible to apply the impregnation once again. The water- and oil repellent effect develops after a few minutes, full protection after 24 hours.
- g) Sufficient ventilation (approx. 2-3 days) is necessary when using the product in food areas.
- h) Tools can be cleaned with AKEMI® Nitro-Dilution, as far as compatibility is given.

**Special Notes:**

- Special protective measure in case of spray application: avoid formation of aerosols and risk to third parties. Do not breathe vapours (protective mask).
- Ensure sealing of the reverse side and lateral surfaces of the stone, so that rising moisture cannot penetrate into the stone. In this context we recommend the use of AKEMI® Anti-Stain Coating 2015 to seal the reverse side and the lateral surfaces.
- If stored at temperatures below 10 C° the product tends to thicken. By warming to approx. 20°C it becomes fully liquid and homogenous.
- If the treated area is cleaned, a drying time of 1 – 2 days (depending on the temperature and atmospheric conditions) is necessary.
- An impregnation with AKEMI® TOP SHIELD Transparent prevents the stone from staining respectively the development of these spots will be delayed considerably. Should they nevertheless appear, the surface can be cleaned much more easily. For regular cleaning we recommend to use AKEMI® Crystal Clean.
- Unsuiting or aggressive cleaning agents as well as pressure washers may destroy the impregnation and the stone.
- Even on stone surfaces impregnated with AKEMI® TOP SHIELD Transparent, it is possible that spots are forming after a long time exposure to aggressive products (e.g. juice, vinegar, alcohol or cosmetics). Yet, this formation is by far lower as on surfaces not being treated. Spots can be avoided by immediately removing these aggressive products.
- Product which has been inaccurately applied, can possibly be removed with AKEMI® Impregnation Remover.
- Limestone surfaces cannot be protected against acid-containing substances.

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- Existing joints must be tested in view of their resistance to solvents. In case wetting agents had been used to smoothen joint fillers, they must be removed prior to application of the impregnation.
- AKEMI® TOP SHIELD Transparent is not suited for glazed and non-absorbent surfaces or plaster.
- A surplus of the product causes blooming and spotting.
- Use AKEMI® Liquid Glove to protect your hands.
- Surfaces to be treated must be protected against direct solar radiation.
- Protect (cover) synthetic materials which are not resistant to solvents, e.g. window screens, parts to be varnished or objects situated in the area of working (cars, gardens).
- On some natural stones like e.g. Nero Assoluto or Nero Impala the stone-imminent structures may be stronger intensified than the residual stone surface if treated with AKEMI® TOP SHIELD Transparent. This might be seen as staining, however, the colour intensification is not a product defect but is attributed to the characteristics of the stone.
- Repeat treatment with AKEMI® TOP SHIELD Transparent regularly on strongly used surfaces.
- When applying the product correctly it is not hazardous for the health.
- For adequate waste disposal container must be completely emptied.

**Technical Data:**

Coverage: approx. 30 – 40 m<sup>2</sup>/liter, on polished surfaces  
Colour: transparent colourless  
Density: approx. 0.87 g/cm<sup>3</sup>

**Storage:**

2 years if stored in cool place free from frost in its tightly closed original container.

**Health & Safety:**

Read Material Safety Data Sheet before handling or using this product.

**Important Notice:**

The above information is based on the latest stage of 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 trials of the product, in an inconspicuous area or fabrication of a sample piece.