Technical Data Sheet

Properties:

AKEMI® Stain Repellent Super is a ready-to-use, weather-resistant and non-yellowing impregnation. The milky product consists of high-quality, modified organic active agents without the use of fluorinated raw materials (PFAS). The product is absorbed by the capillary forces of the stone without closing the pores. This results in very high effectiveness and durability.

The product is characterized by the following properties:
- it is formulated to be PFAS-free, is therefore not based on PFOA, PFHxA or PFOS, nor does it decompose into these substances
- long-lasting protective effect
- fast development of protection; improved efficiency
- distinctive pearl effect
- usually no or only slight colour intensification on polished stone; on non-polished stone a colour intensification is possible
- very good water, dirt, oil and grease repellent effect (tested on natural and artificial stone in accordance with DIN EN ISO 10545-14 and CTIOA T-72)
- fast liberation of humidity during dry periods due to high vapour permeability
- maintenance of breathing properties because there is no surface layer
- tack-free hardening
- non-yellowing
- resistance to UV radiation
- no release of methanol during hardening
- emission class A+ (confirmed by an external testing institute)
- after hardening the product is harmless to health upon contact with food products (certified by an external German testing institute)

Application Area:

AKEMI® Stain Repellent Super is used for water-, grease- and oil repellent treatment of mineral building material, e.g. natural and artificial stone (polished ground or rough surfaces of marble, limestone, granite, gneiss, porphyry, cotto, terrazzo, fine stoneware, concrete, unglazed ceramic tiles, quartz etc.). Special areas of application are kitchen coverings, kitchen working tops, bathrooms (washbasins, marble tiles on walls and floors), tables, window sills, tile joints, facades.

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 used outdoors, make sure that the stone does not include any harmful salts (nitrates, sulphates, chlorides), as these reduce the absorption 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 Moss Remover, Oil and Grease Remover Paste, Graffiti-Remover. Please pay attention to our care recommendations as well as the respective Technical Data Sheets. In any case, after cleaning rinse well with water. 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.

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2. **Preparation of a sample area:**
Before starting we recommend preparing a sample area of 1 - 2 m² 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.

3. **Impregnation procedure:**

a) The best condition for impregnating is a temperature of 15 - 25°C and protection from humidity for approx. 2 - 3 hours. The stone must not be warmed up by an underfloor 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. In case of less absorbent surfaces, we recommend diluting with AKEMI® Nitro-Thinner in the ratio of 1:1.
d) Apply the product with a brush or a mop. Airless spraying equipment with low pressure (max. 1 bar over pressure) is suitable for treating cades using the flooding (multiple-coat) method and a jet distance of 5 - 10 cm (condition: tubes and seals must be resistant to solvents). The impregnation is applied until it runs down 40 - 50 cm.
e) Approx. 25 - 30 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 approx. 2 to 3 hours, full protection after approx. 24 hours.
g) Sufficient ventilation (approx. 2 - 3 days) is necessary when using the product in food areas.
h) Clean tools with AKEMI® Nitro Thinner.

Special Notes:

- For professional use only.
- Special protective measure in case of spray application: avoid
- formation of aerosols and risk to third parties. Do not breathe vapours (protective mask).
- Not compatible with acetone.
- 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 solidifies. Heating it to approx. 20 - 40°C and shaking/stirring makes it completely liquid and homogenous again.
- If the treated area is cleaned, a drying time of 1 - 2 days (depending on the temperature and weather) is necessary.
- An impregnation with AKEMI® Stain Repellent Super 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.

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- Unsuited or aggressive cleaning agents as well as pressure washers may destroy the impregnation and the stone. We recommend using AKEMI® Mild Stone Soap or AKEMI® Crystal Clean for the regular cleaning.
- The product should be re-applied once a year on surfaces which are heavily used (e.g. floors).
- Even on stone surfaces impregnated with Stain Repellent Super, it is possible that spots are forming after a long time of exposure to aggressive products (e.g. juice, vinegar, alcohol or cosmetics). Yet, this formation is by far lower as on surfaces not being treated with Stain Repellent Super. Spots can be avoided by immediately removing these aggressive products.
- Product which has been inaccurately applied, can possibly be removed with AKEMI® Impregnation Remover.
- 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® Stain Repellent Super is not suited for glazed and non-absorbent surfaces or plaster.
- A surplus of the product causes blooming and spotting.
- Surfaces to be treated must be protected against direct solar radiation.
- Protect synthetic materials which are not resistant to solvents, e.g. window screens, parts to be varnished or objects 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 Stain Repellent Super. This might be seen as staining, however, the colour intensification is not a product defect but is attributed to the characteristics of the stone.
- For proper waste disposal, the container must be completely emptied.
- Recycling in accordance with the guidelines of EU Decision 97/129 EC on the Packaging Directive 94/62/EC.

Technical Data:

Coverage:	up to 25 m²/liter - depending on the absorptive capacity of the stone
Colour:	transparent yellowish
Density:	approx. 0.78 g/cm³

Storage:

If stored in dry and cool condition (5-25°C/41-77°F) in its closed original container at least 24 months from production.

Health & Safety:

Read 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 trails of the product, in an inconspicuous area or fabrication of a sample piece.

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