

**Technical Instruction Sheet**

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**Characteristics:**

AKEMI Marble Fillers 1000 Coloured L-Special are knife-grade 2-component products based on unsaturated polyester resins dissolved in styrene. The products are distinguished by the following qualities:

- very good workable because of gel-like consistence.
- very good application due to a gelatinous consistence
- fast hardening (30 – 90 minutes)
- excellently polishable
- very good adhesion on Engineered Stone and natural stones also at - higher temperatures (60 - 70°C; in case of low exposure to strain: 100 - 110°C)
- resistant to water, petrol and mineral oils.

**Field of Application:**

Marble Fillers 1000 Coloured L-Special are mainly used for bonding Zodiaq® stones and in the stone processing industry for bonding natural stones and forming of rock substitutes with crushed rocks and sand.

**Instructions for Use:**

1. The surface to be treated must be clean, completely dry and slightly roughened.
2. Add 2 to 4 g of white hardener paste to 100 g of filler (4 to 5 cm of paste pressed out of the screw tube correspond to 1 g).
3. Mix both components thoroughly. The mixture can be worked for about 7 to 16 minutes (20°C/68°F), depending on the product.
4. After 30 to 90 minutes the treated parts can be further processed (grinding, milling, drilling).
5. The hardening process is accelerated by heat and delayed by cold.
6. Tools can be cleaned with AKEMI Nitro-Dilution.

**Special Hints:**

- Use AKEMI® Liquid Glove to protect your hands.
- Hardener portions higher than 4 % reduce adhesion and deteriorate surface drying.
- Hardener portions less than 1 % and low temperatures (under 5°C) considerably delay hardening.
- An adhesive which is already thickened or just gelling should not be used anymore.
- The bonding layers should be as thin as possible (< 1 mm) due to shrinkage (approx. 5-8 %) caused by the high reactivity of the filler and development of heat during the hardening process.
- Limited durability of bondings which are frequently exposed to humidity and frost.
- Moderate adhesion on fresh, alkaline building materials (e.g. concrete, concrete bricks).
- The hardened filler has a slight tendency to yellowing.
- Once hardened, the filler can no longer be removed by solvents. Removal is only possible mechanically or by higher temperatures (> 200°C).
- Being worked properly, the hardened filler is generally recognized as not injurious to health.

**Safety Measures:** see Material Safety Data Sheet

**Technical Data:** Colour: different  
Density: approx. 1.17 g/cm<sup>3</sup>

Working time / min.:

a) at 20°C

2% of hardener: 10 - 12

3% of hardener: 8 - 9

4% of hardener: 7 - 8

b) with 2% of hardener

at 10°C: 20 - 24

at 20°C: 10 - 12

at 30°C: 5 - 6

Mechanical Properties:

Tensile strength DIN 53455: 40 - 50 N/mm<sup>2</sup> 5800 - 7250 psi

Bending strength DIN 53452: 80 - 90 N/mm<sup>2</sup> 11600 - 13050 psi

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 technical progress. It is to be considered as a non-binding hint and does not release the user from a performance test, since application, processing and environmental influences are beyond our realm of control.