Technical Data Sheet

Properties:

AKEMI® Marble Filler 1000 S is a paste-like 2-component products based on unsaturated polyester resins dissolved in styrene containing mineral filling agents.

The product is characterized by the following qualities:
- good working properties also on vertical surfaces due to paste-like consistency
- fast hardening (10 - 20 minutes)
- good working properties (grinding, milling, drilling)
- excellently polishable
- very good adhesion on natural stone also at higher temperatures (70 - 80°C; in case of low exposure to strain: 100 - 110°C)
- resistant to water, petrol and mineral oils

Application Area:

AKEMI® Marble Filler 1000 S is mainly used in stone processing industry for filling natural stone. Due to their paste-like consistency it is possible to model corners and edges, fill bigger holes without sagging, fix slabs and window sills and to bond vertical surfaces. Particularly worth mentioning is the product in neutral colour which does not contain any colour pigments and can thus easily be coloured to any shade required by adding AKEMI® Polyester Colouring Pastes, Colouring Concentrates liquid or Spectrum Pastes. AKEMI® Marble Filler 1000 S is suitable for use to secure the position of sliding sleeves and anchor pins during anchor pin fastening in accordance with DIN 18516-external wall cladding, ventilated Part 3: natural stone requirements, dimensioning.

Instructions for Use:

1. The surface to be treated must be clean, completely dry and roughened.
2. Colouring is possible by adding AKEMI® Polyester Colouring Pastes, Colouring Concentrates liquid or Spectrum Pastes up to max. 5%. Dilution is possible in any ratio by adding AKEMI® Marble Filler 1000 transparent extra liquid.
3. Add 1 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).
4. Mix both components thoroughly. The mixture can be worked for approx. 3 to 10 minutes (20°C).
5. After 10 to 20 minutes the treated parts can be further processed (grinding, milling, drilling).
6. The hardening process is accelerated by heat and delayed by cold.
7. Tools can be cleaned with AKEMI® Nitro-Thinner.

Special Notes:

- For professional use only.
- Use afin® 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 (below 5°C) considerably delay hardening.
- The bonding layers should be as thin as possible (< 2 mm) due to shrinkage (approx. 2 - 3%) caused by the high reactivity of the filler and development of heat during the hardening process.
- When filling bigger holes or modelling corners and edges, use as little hardener as possible.

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- Bondings between natural and artificial stone that are frequently exposed to moisture and possibly frost are not stable due to decreasing adhesion.
- If the product - as described in DIN 18516-3 - is used to fill the anchor mandrel and the sliding sleeve in the mandrel hole, the cohesion of the product is resistant to freeze-thaw cycles in accordance with DIN EN 12058 and is suitable for this outdoor application.
- Only moderate adhesion on fresh, alkaline building materials (e.g. concrete, concrete bricks).
- 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.
- 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:

Colours:	jura light, neutral, white, black
Density:	1.75 - 1.80 g/cm³

Working time (min.):

a) at 20°C	
1% of hardener:	8 - 10
2% of hardener:	5 - 6
3% of hardener:	4 - 5
4% of hardener:	3 - 4
b) with 2% of hardener:	
at 10°C:	10 - 12
at 20°C:	5 - 6
at 30°C:	2 - 3

Mechanical properties after 7 days hardening at room temperature:

Tensile strength DIN EN ISO 527:	15 - 20 N/mm²
Compressive strength DIN EN ISO 604:	75 - 85 N/mm²
Bending strength DIN EN ISO 178:	25 - 35 N/mm²

Mechanical properties after 56 freeze-thaw cycles in accordance with DIN EN 12058:

Compressive strength DIN EN ISO 604:	75 - 85 N/mm²
Bending strength DIN EN ISO 178:	25 - 35 N/mm²

Storage: If stored in dry and cool condition (5-25°C/41-77°F) in its closed original container at least 12 months from production.

Health & Safety: Read Safety Data Sheet before handling or using this product.

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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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