

Technical Data Sheet

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Properties:

AKEMI® Marble Filler 1000 Transparent Waterclear and Transparent Waterclear L-Special are highly liquid or gel-like 2-component products based on UV-stabilized, unsaturated polyester resins dissolved in styrene. The products are distinguished by the following qualities:

- wide field of application due to different consistencies
- no colour of their own, therefore suited for light, mainly transparent-crystalline natural stones
- due to slow hardening and low tensions bigger defects, corners and edges can be filled
- easily polishable
- very good adhesion on natural stones
- resistant to water, petrol and mineral oils

Application Area:

AKEMI® Marble Fillers Waterclear are mainly used in stone processing industry for filling and bonding light or white, transparent-crystalline natural stones s.a. Thassos, Carrara, Onyx, Palisandro, Estremoz or the like. Due to the liquid, colourless-transparent appearance waterclear bonding can be made which maintain the stereoscopic structure of the stone. By adding little quantities of AKEMI® Polyester Colouring Pastes or AKEMI® Polyester Colouring Concentrates to AKEMI® Marble Filler Transparent Waterclear L-Special, corners and edges can be modelled or bigger holes can be filled. Thus an appearance very similar to the stone or bonding joints which are almost invisible can be achieved. When working with crystalline natural stones we recommend mixing some crushed granular material in the filler to imitate the crystal structure of the stone.

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 or AKEMI® Polyester Colouring Concentrates up to max 5%. Dilution is possible by adding Thinner S up to 8%.
3. Add 1 to 2 g of hardener B liquid (35 - 70 drops) to 100 g of filler.
4. Mix both components thoroughly. The mixture can be worked for approx. 12 to 24 minutes (20°C).
5. After approx. 6 to 8 hours the treated parts can be exposed to strain, after 12 hours approx. they 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-Dilution.

Special Notes:

- Use AKEMI® Liquid Glove to protect your hands.
- Waterclear products only harden with Hardener B Liquid.
- Hardener portions higher than 2% cause more or less intensive discolouring. Hardener portions less than 1% and low temperatures considerably delay hardening.
- Permanent influence of heat (> 50°C) causes discolouring and reduces the bonding properties..
- Non-durable resistance of bondings which are frequently exposed to humidity and frost.
- Only moderate adhesion on fresh, alkaline building materials (e.g. concrete, concrete bricks).

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- 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.

Technical Data:

Colour: colourless transparent (Waterclear)
colourless milky-turbid (Waterclear L-Sp.)

Density: 1.12 – 1.18 g/cm³

Consistency:
Waterclear: liquid
Waterclear L-Special: gel-like

Working time (min.):

a) at 20°C

| | |
|----------------------|---------|
| 1 % of hardener B: | 20 - 24 |
| 1.5 % of hardener B: | 16 - 20 |
| 2 % of hardener: | 12 - 16 |

b) with 1.5 % of hardener:

| | |
|----------|---------|
| at 10°C: | 35 - 40 |
| at 20°C: | 16 - 20 |
| at 30°C: | 7 - 10 |

Mechanical Properties:

| | |
|-----------------------------|---------------------|
| Tensile strength DIN 53455: | 50N/mm ² |
| Bending strength DIN 53452: | 80N/mm ² |

Storage:

1 year approx. 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.

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