

Technical Instruction Sheet

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Characteristics:

AKEMI Marble Fillers 1000 Universal with Structure are liquid, creamy 2-component products based on unsaturated polyester resins dissolved in styrene, containing mineral filling agents and structure pigments. The products are distinguished by the following qualities:

- imitation of the natural stone structure by structure pigments
- easily additional colouring by AKEMI polyester colouring pastes
- good working properties on horizontal surfaces due to liquid, creamy consistency
- fast hardening (20 - 40 minutes)
- good working properties (grinding, milling, drilling)
- excellently polishable
- very good adhesion on natural stones also at higher temperatures (70 - 80°C; in case of low exposure to strain: 100 - 110°C)
- resistant to water, petrol and mineral oils.

Field of Application:

Marble Fillers 1000 Universal with Structure are mainly used in stone processing industry for filling, bonding and restoring natural stones. Due to their liquid, creamy consistency the products are suited to fill holes or fissures and to bond horizontal surfaces of natural stones. The contained structure pigments imitate the natural stone structure with the result that even bigger filling areas are no longer perceptible. The quality of the natural stone is in this way not only significantly improved but the rejects can be reduced. By using Akemi Polyester Colouring Pastes the products can be adapted to any required colour shade.

Instructions for Use:

1. The surface to be treated must be clean, completely dry and slightly roughened.
2. Colouring is possible by adding AKEMI Polyester Colouring Pastes up to max 5 %. Dilution is possible in any ratio by adding Marble Filler 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 about 3 to 10 minutes (20°C) (Universal *).
5. After 15 to 35 minutes (*) the treated parts can be further processed and transported.
6. The hardening process is accelerated by heat and delayed by cold.
7. 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.
- 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.
- 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 EC Safety Data Sheet

Technical Data:

Colour: Structure Jura – light brown
Structure Impala – dark grey
Structure Travertine - light

Density: 1.70 - 1.75 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:

Tensile strength DIN 53455: 20 - 30 N/mm²
Bending strength DIN 53452: 100 - 110 N/mm²

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.