

Technical Instruction Sheet

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- Characteristics:** AKEMI® Poly-Liquid is a liquid 2-component product based on unsaturated polyester resins dissolved in styrene, containing mineral filling agents. The product is distinguished by the following qualities:
- very good working properties on horizontal surfaces due to liquid consistency
 - fast hardening (20 - 60 minutes)
 - good working properties (grinding, milling, drilling)
 - good polishing properties.
 - very good adhesion on natural stones also at higher temperatures (70 - 80°C / 158 - 176°F; in case of low exposure to strain: 100 - 110°C / 212 - 230°F)
 - resistant to water, petrol and mineral oils.
- Field of application:** AKEMI® Poly-Liquid is mainly used in stone processing industry for filling and bonding natural and artificial stones. Due to its liquid consistency the product is suited to fill small and middle-size holes or fissures and to bond horizontal surfaces.
- 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 %.
 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 - 20 minutes (20°C/68°F).
 5. After 20 - 60 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/41°F) considerably delay hardening.
 - The bonding layers should be as thin as possible (< 2 mm) due to shrinkage (approx. 2 - 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/392°F).
 - Being worked properly, the hardened filler is generally recognised as not injurious to health.
- Safety Measures:** see EC Safety Data Sheet

Technical Data: Colours: white, black, paglierino light, paglierino dark, paglierino extra dark, paglierino yellow, transparent

Density: 1.65 – 1.75 g/cm³ (coloured)
1.05 – 1.15 g/cm³ (transparent)

Working time/min:

a) at 20°C / 68°F	(coloured)	(transparent)
1 % hardener	8 - 10	16 - 20
2 % hardener	5 - 7	10 - 12
3 % hardener	4 - 5	8 - 10
4 % hardener	3 - 4	6 - 8

b) with 2 % hardener		
at 10°C / 50°F	10 - 14	20 - 25
at 20°C / 68°F	5 - 7	10 - 12
at 30°C / 86°F	2 - 3	5 - 6

Shelf life: 1 year approx. if stored in cool place free from frost in its tightly closed original container.

Notice: The above specifications were made in accordance with the present-day stage in development and the application technology research of our firm. Because the ways and means of application are beyond our control, the manufacturer cannot be made liable for the contents of this specification sheet.