

Technical Data Sheet

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- Properties:** AKEMI® Everclear 510 is a gel-like, solvent-free two-component reaction-resin system. The product is distinguished by the following properties:
- almost no yellowing (also outdoors)
 - suitable for outdoor and indoor bondings of hard stone (e.g. granite) and Techno Ceramic
 - suitable for indoor bondings of soft stone (marble, Jura limestone etc.)
 - transparent, colourless
 - solvent-free
 - no discolouring in the contact area
 - good stability due to gel-like consistency
 - very low shrinkage, therefore only minimal tension within the bonding joint
- Application Area:** AKEMI® Everclear 510 is mainly used in the stone working industry for bonding and filling of natural stone (marble, granite) as well as artificial stone or building material (terrazzo, concrete). It is possible to treat very light-coloured respectively white natural stone because Everclear 510 is a system with a very high stability to yellowing. Due to its gel-like, smooth consistency the product has a good stability in vertical areas, furthermore thin bonding joints can be made. In addition other materials like for example plastics, paper, wood, glass and the more can be bonded with Everclear 510. Due to the variety of materials existing we recommend a testing bond. Polyolefins like polyethylene, polypropylen, teflon (e.g. PTFE), silicone and other materials containing plasticisers (e.g. soft PVC) are not suited to be bonded with Everclear 510.
- Instructions for Use:** The surfaces to be bonded must be thoroughly cleaned (free of dust, dirt and grease), slightly roughen smooth surfaces.
- Product in cans:
1. 100 g of component A are to be homogenously mixed with 100 g of component B. The mixing ratio must be strictly observed to.
 2. Colouring is possible by adding up to 2% of polyester colouring pastes.
 3. The mixture remains workable for approx. 10 - 12 minutes (20°C), after approx. 2 hours (20°C) the bonded parts may be moved, after approx. 5 hours they may be further processed. Max. stability after approx. 7 days.
 4. Clean tools immediately with AKEMI® Universal Dilution.
 5. The hardening process is accelerated by heat and delayed by cold.
- Product in cartridges:
1. Remove the clasp from the cartridge and put the cartridge in the gun; work the grip until material emerges from both openings; then eventually screw up the mixing nozzle. Do not use the first 10 cm emerging from the mixing nozzle!
 2. If used without mixing nozzle both components have to be thoroughly mixed.
 3. Colouring Pastes for polyester can be added up to max. 2%.
 4. The mixture remains workable for approx. 10 - 12 minutes (20°C), after approx. 2 hours the bonded parts may be moved, after approx. 5 hours they may be further processed. Final stability after approx. 7 days.

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5. Clean tools immediately with AKEMI® Universal Dilution.
6. The hardening process is accelerated by heat and delayed by cold.

Special Notes:

- Only conditionally suitable in areas with permanent moisture or in direct contact with water.
- The optimal mechanical and chemical properties can only be attained by adhering to the exact mixing proportions; excess adhesive has the effect of a plasticizer and may slowly cause yellowing.
- The surfaces to be bonded must be dry, clean and free of grease. Humidity results in a formation of bubbles in the glue and therefore in a loss of stability.
- We recommend an application temperature of at least 15°C, temperatures below 15°C may already lead to poorer adhesion on some surfaces.
- The product is not to be used at temperatures below 5°C, because it will not sufficiently harden.
- The bonding should not be permanently exposed to temperatures above 60°C, for a short period of time temperatures up to 100°C are possible.
- The hardened product can be removed only mechanically.

Technical Data:

Colour: colourless, opaque
Density: component A: 1.10 g/cm³
 component B: 1.16 g/cm³

Working time: 5°C: approx. 30 minutes
 20°C: approx. 10 minutes
 30°C: approx. 9 minutes
 40°C: approx. 8 minutes
 50°C: approx. 7 minutes

Hardening process (Shore D hardness) at 20°C:

<u>3 hrs</u>	<u>4 hrs</u>	<u>6 hrs</u>	<u>24 hrs</u>	<u>7 days</u>
50	60	70	73	77

Mechanical properties:

Bending strength 50 – 60 N/mm² (DIN EN ISO 178)
Tensile strength 20 – 30 N/mm² (DIN EN ISO 527)

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. Use open containers as quick as possible.

Health & Safety:

Read 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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