Technical Data Sheet

Properties:

AKEMI® Gel-o-fix Crystal is a gel-like, solvent-free, two-component adhesive based on an epoxy resin and a modified polyamine hardener. The product characterized by the following properties:

- very natural color and therefore easy coloring with Akepox Coloring Tints
- very good non-sag properties
- extremely low shrinkage during the hardening process and therefore low tensions in the bonding layer
- weather-resistant bondings
- good dimensional stability of the bonding layer
- very good alkali-stability, thus the adhesive is very well suited to bond concrete
- excellently suited for bonding gas-impermeable materials as it is a solvent-free product
- suited for bonding materials which are sensitive to solvents (e.g. expanded polystyrene, ABS)

Application Area:

AKEMI® Gel-o-fix Crystal is mainly used in the stone processing industry for bonding of natural stones (marble, granite), artificial stones or building material (concrete, terrazzo). Due to its gel-like consistency the product is very stable in a vertical position and is suitable for filling holes or joints and modelling corners or edges. In addition surfaces which are relatively uneven can thus be connected. Other materials s. a. plastics (rigid PVC, polyester, polystyrene, ABS, polycarbonate), paper, wood and glass can be bonded. Materials s.a. polyolefine (polyethylene, polypropylene), silicone, fluorohydrocarbons (Teflon), flexible PVC, flexible PU, butyl rubber and metal cannot be bonded with AKEMI® Gel-o-fix Crystal.

Instructions for Use:

1. The surfaces to be bonded have to be clean, dry and slightly roughen.
2. Two part by weight or by volume of Component A is to be thoroughly mixed with one part by weight or by volume of Component B until a homogeneous shade of color is achieved.
3. AKEPOX® Coloring Pastes or Coloring Tints can be used for coloring if required (max. 5%).
4. The mixture remains workable for approx. 40 to 50 minutes (20°C). After 10 - 12 hours (20°C) the bonded parts may be moved, after 16 – 24 hours (20°C) approx. they may be further processed. Max stability after 7 days (20°C).
5. Tools can be cleaned with AKEMI® Universal Dilution.
6. Warmth accelerates and cold retards the hardening process.
7. Empty the container fully before disposing of it.

Special Notes:

- The optimal mechanical and chemical properties can only be attained by adhering to the exact mixing proportions; excess adhesive or hardener has the effect of a plasticizer.
- Use AKEMI® Liquid Glove to protect your hands.
- Use separate spatula when component A and B are being extracted from their containers. Mixing should be done with third spatula.
- The resin is no longer to be used if it has already thickened or is jellying.
- The product is not to be used at temperatures below 10°C because it will not sufficiently harden.

AKEMI GmbH · Lechstraße 28 · 90451 Nürnberg · Germany
Tel. +49(0)911-64296-0 · Fax +49(0)911-644456 · www.akemi.com

Technical Data Sheet

- The hardened adhesive tends to yellowing when exposed to sunlight or heat and is therefore not suitable for white or light colored stones.
- The hardened resin can no longer be removed by means of solvents. This can only be achieved mechanically or by applying higher temperatures (> 200°C).

Technical Data:

1. Color:		comp. A: transparent milky comp. B: transparent milky
2. Density:		comp. A: approx. 1.18 g/cm³ comp. B: approx. 1.10 g/cm³
3. Working time:		
mixture of 100 g component A + 50 g of component B:	OR	at 20°C: 40 – 50 minutes at 30°C: 20 - 35 minutes
By Volume 100 ml. Component A + 50 ml. Component B		at 40°C: 10 – 15 minutes

Storage:

2 years approx. under cool conditions in the firmly 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 trails of the product, in an inconspicuous area or fabrication of a sample piece.

AKEMI GmbH · Lechstraße 28 · 90451 Nürnberg · Germany
Tel. +49(0)911-64296-0 · Fax +49(0)911-644456 · www.akemi.com