

## Technical Data Sheet

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**Properties:**

AKEPOX® 3015 Rapid Bond is a liquid, solvent-free, two-component adhesive based on an epoxy resin containing a modified special hardener. The product characterized by the following properties:

- can be stressed very quickly due to its high initial stability
- very rapid hardening
- easy dosing and mixing by use of cartridge system
- extremely low shrinkage during the hardening process and therefore low tensions in the bonding layer
- high elasticity and viscosity of the bonding layer
- a very good alkali-stability, therefore very well suited to bond concrete
- excellently suited for bonding gas-impermeable materials as it is a solvent-free product
- good electrical insulating property
- suited for bonding materials which are sensitive to solvents (e.g. expanded polystyrene, acrylonitrile butadiene styrene)
- good adhesion on slightly humid stones
- only limited weather-resistance of the outdoor bonding
- the product is not liable to crystallize, therefore no problems in storing and processing

**Application Area:**

AKEPOX® 3015 Rapid Bond is an universal adhesive for bonding natural and artificial stones, concrete, metal (iron, steel, aluminium, copper), wood, ceramics, glass and various synthetic materials (GRP, polystyrene, rigid PVC, polyester). The rapid hardening time, very good contact adhesion and liquid consistency make the product suitable for false edges, assembly work and bonding of profiles. The product is not suited for bondings under permanent wet conditions, for slot reinforcements as well as for bonding polyolefin (polyethylene, polypropylene), silicone, fluorohydrocarbons (Teflon), flexible PVC, flexible polyurethane and butyl rubber.

**Instructions for Use:**

- without mixing nozzle: dosing apparatus only
  - with mixing nozzle: dosing and mixing apparatus at the same time
1. Thoroughly clean and slightly roughen surfaces to be bonded.
  2. 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.
  3. Both components must be thoroughly mixed when working without mixing nozzle.
  4. The mixture remains workable for approx. 3 - 5 minutes (20°C). After 20 - 40 minutes (20°C) the adhesive has a good initial stability, after 2 - 4 hours (20°C) the bonding may be stressed. Maximal stability after 7 days.
  5. Tools can be cleaned with AKEMI® Nitro-Dilution.
  6. Empty the container fully before disposing of it.

**Special Notes:**

- Metallic surfaces should be ground in a short interval before bonding to avoid a decrease in adhesion.
- Use AKEMI® Liquid Glove to protect your hands.
- 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.

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- The hardened adhesive tends to considerable yellowing when being exposed to sunlight.
- 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).
- If the resin has been correctly worked it presents no hazard to health when the hardening process is completed.
- Use AKEMI® original mixing nozzles only.

**Technical Data:**

1. Colour (comp. A + B): black
2. Density: approx. 1.6 g/cm<sup>3</sup>
3. Working time:
  - at 10°C: 6 – 10 minutes
  - a) mixture of 75 g component A + 75 g of component B:
    - at 20°C: 3 – 5 minutes
    - at 30°C: 2 – 3 minutes
    - at 40°C: 1 – 2 minutes
  - b) at 20°C and varying amounts:
    - 15 g comp. A + 15 g comp. B}
    - 40 g comp. A + 40 g comp. B}
    - 75 g comp. A + 75 g comp. B}
    - 250 g comp. A + 250 g comp. B}
4. Mechanical properties:
  - Bending test DIN ESO 178: 15 – 20 N/mm<sup>2</sup>
  - Tensile test DIN EN ISO 527-1: 8 – 9 N/mm<sup>2</sup>

**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 trials of the product, in an inconspicuous area or fabrication of a sample piece.

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