

Technical Data Sheet

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Properties: AKEMI® PLATINUM Premium epoxyacrylate adhesives are flowing or knife-grade 2-component products based on unsaturated epoxyacrylate resins dissolved in styrene. The products are distinguished by the following qualities:

- wide field of application due to different consistencies
- very light, transparent colour
- fast hardening (15 - 40 minutes)
- excellent surface drying
- excellently polishable
- improved protection against yellowing
- very good adhesion on natural stones also at higher temperatures (60 - 70°C /140 - 158°F); in case of low exposure to strain: 100 - 110°C/212 - 230°F)
- resistant to water, petrol and mineral oils
- after hardening the product is harmless to health upon contact with food products – certified by an external German testing institute

Application Area: AKEMI® PLATINUM adhesives are mainly used in stone processing industry for bonding natural stones, Engineered Stone, ceramics and large-size techno ceramic (e.g. Dekton®, Lapitec®, Neolith®, Laminam®, Kerlite®, Maxfine), reinforcement of natural stone slabs with glass fibre products (laminating) and forming of rock substitutes with crushed rocks and sand.

Special properties:

PLATINUM clear flowing: moderately viscous consistency
PLATINUM clear knifegrade: knife-grade consistency for vertical applications

Instructions for Use:

1. The surface to be treated must be clean, completely dry and roughened.
2. Colouring is possible by adding AKEMI® Polyester Colouring Pastes or Colouring Concentrates up to max. 5 %. PLATINUM clear knife-grade can be diluted in any ratio by adding PLATINUM clear flowing.
3. Add 1 to 3 g of white hardener paste to 100 g of adhesive (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 5 to 15 minutes (20°C/68°F), depending on the product and the quantity of hardener added.
5. After 15 to 40 minutes the treated parts can be further processed (grinding, milling, drilling).
6. The hardening process is accelerated by heat and delayed by cold.
7. Tools can be cleaned with AKEMI® Nitro-Dilution.

Special Notes:

- Use AKEMI® Liquid Glove to protect your hands.
- Hardener portions higher than 4 % reduce adhesion and deteriorate surface drying.
- Hardener portions higher than 3% cause a striking yellowness in the hardened product.
- Hardener portions less than 1 % and low temperatures (below 5°C/41°F) considerably delay hardening.
- An adhesive which is already thickened or just gelling should not be used anymore.

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- The bonding layers should be as thin as possible (< 1 mm) due to shrinkage (approx. 5-8 %) caused by the high reactivity of the filler and development of heat during the hardening process.
- Non-durable resistance of bondings which are frequently exposed to humidity and frost.
- Moderate adhesion on fresh, alkaline building materials (e.g. concrete, concrete bricks).
- The hardened adhesive has a low tendency to yellowing.
- Once hardened, the adhesive 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 adhesive is generally recognized as not injurious to health.

Technical Data:

	<u>clear flowing</u>	<u>clear knife-grade</u>
Colour:	transparent clear	transparent opaque
Density:	approx. 1.04 g/cm ³	approx. 1.10 g/cm ³

Working time / min.:

a) at 20°C/68°F

1% of hardener:	13 - 15	13 - 15
2% of hardener:	6 - 8	6 - 8
3% of hardener:	4 - 6	4 - 6

b) with 2% of hardener:

at 10°C/50°F:	10 - 18	10 - 18
at 20°C/68°F:	6 - 8	6 - 8
at 30°C/86°F:	3 - 5	3 - 5

Tensile strength DIN EN ISO 527: 40 – 45 N/mm²

Bending strength DIN EN ISO 178: 70 – 80 N/mm²

Compression strength DIN EN ISO 604:100 – 110 N/mm²

Storage:

1 year approx. if stored in cool place free from frost in its tightly 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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