Technical Data Sheet

Properties:

AKEMI® PLATINUM P+ adhesives are flowing or knife-grade 2-component products based on unsaturated epoxyacrylate resins dissolved in styrene. The products are characterized 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
- improved adhesion and bonding strength, also on Techno Ceramic
- very good adhesion on natural stones also at higher temperatures (60 - 70°C; in case of low exposure to strain: 100 - 110°C)
- resistant to water, petrol and mineral oils
- when properly applied, the hardened product is classified as harmless to health for bondings of natural and artificial stone as well as ceramics upon contact with food

Application Area:

AKEMI® PLATINUM P+ adhesives are mainly used in stone processing industry for bonding natural stone, quartz, ceramics and large-size Techno Ceramic (e.g. Dekton®, Lapitec®, Neolith®, Laminam®, Kerlite®, Maxfine), reinforcement of natural stone slabs with glass fiber products (laminating) and forming of rock substitutes with crushed rocks and sand.

Special properties:
PLATINUM P+ clear flowing: moderately viscous consistency
PLATINUM P+ clear knife-grade: 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 either AKEMI® Polyester Colouring Pastes, Colouring Concentrates up to max. 5% or AKEMI® Spectrum Pastes. PLATINUM P+ clear knife-grade can be diluted in any ratio by adding PLATINUM P+ 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), 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 Thinner.

Special Notes:

- Use afin® 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) considerably delay hardening.

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

Technical Data Sheet

- An adhesive which is already thickened or just gelling should not be used anymore.
- 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).
- Being worked properly, the hardened adhesive is generally recognized as not injurious to health.

Technical Data:

	clear flowing	clear knife-grade
Colour:	transparent clear	transparent opaque
Density:	approx. 1.04 g/cm³	approx. 1.10 g/cm³
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:

If stored in dry and cool condition (5-25°C/41-77°F) in its closed original container at least 12 months from production.

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 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