Technical Data Sheet

Properties:

AKEPOX® 4050 Anti-Slip Mix is a smooth, corundum-containing, solvent-free, 2-component paste based epoxy resins containing a modified polyamine hardener.

The product is characterized by the following properties:
- easy dosing and mixing by use of cartridge system
- easy workability due to its smooth consistency
- can be applied without flute on the stone
- very low shrinkage during hardening
- very good resistance to weathering
- very high stability in contact with alkalis, therefore very suitable for concrete surfaces
- excellent non-slipping characteristic (R11) despite closed surface, enabling easy cleaning
- good adhesion on mineral surfaces and high stability towards abrasion
- no tendency towards crystallization, therefore good storage stability and good processing security
- certified by the German institute for Occupational Safety and Health of the DGUV

Application Area:

AKEPOX® 4050 Anti-Slip Mix creates a very non-slipping surface in the form of a stripe, edge and/or ornament on mineral surfaces on natural stone (marble, lime stone, granite), concrete ashlar or ceramic tiles on stairs, surfaces exposed to water, in entrance areas of buildings and on inclined surfaces. Furthermore, AKEPOX® 4050 Anti-Slip Mix is suitable for optical contrast in public spaces for barrier-free use on surfaces or stairs. AKEPOX® 4050 Anti-Slip Mix can be used on silicate bound natural stone (e.g. granite), concrete ashlar and ceramic indoors and outdoors, on limestone and marble only indoors. The product can be applied for visual stripes according to DIN 18040/part 1 in combination with AKEMI® Lettering Colour Sprays and Lettering Primer Spray.

Instructions for Use:

- without mixing nozzle: dosing apparatus only
- with mixing nozzle: dosing and mixing apparatus at the same time

1. Thoroughly clean and completely dry surfaces. Mark off the area to be bonded with adhesive tape and thoroughly roughen the surface.
2. Remove the clasp from the cartridge. Insert the cartridge into the gun, working the grip until material emerges from both openings. Attach a mixing nozzle, if required.
3. In case no mixing nozzle is used, thoroughly mix both components.
4. The mixed product should be applied at least 1 mm and maximum 2 mm. An optimum layer thickness of 1 mm approx. is achieved when using the Marking Adhesive Tape for AKEPOX® 4050 Anti-Slip Mix. Remove excess material with a spatula flush to the adhesive tape. Remove the adhesive tape latest 10 minutes after application of the product.
5. The mixture remains workable for approx. 100 - 120 minutes (20°C/68°F). After approx. 3 - 5 hours (20°C/68°F) the surfaces are dry, after 12 - 16 hours (20°C/68°F) they can be walked on. Maximum stability after 7 days (20°C/68°F).
6. Tools can be cleaned with AKEMI® Nitro Thinner.
7. Warmth accelerates, cold retards the hardening process.

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

Technical Data Sheet

Special Notes:

- For professional use only.
- 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.
- The resin is no longer to be used if it has already thickened or is jellying.
- The product must not to be used at temperatures below 15°C because it will not sufficiently harden.
- 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 only original AKEMI® mixing nozzles.
- Acid-containing products (e.g. AKEMI® Concrete Film Remover and AKEMI® Rust Remover) lighten the colour of the hardened Anti-Slip Mix layer. This particularly applies to the colour anthracite.
- Due to weathering of limestone in outdoor areas, a reduction of adhesion of the product is possible.
- Surfaces with a white film caused by the penetration of humidity during the hardening process can be cleaned with AKEMI® Cleaner I and a solvent-resistant brush.
- The hardened product is resistant against petrol and diluted, inorganic acids.
- For proper waste disposal the container must be completely emptied.
- Recycling in accordance with the guidelines of EU Decision 97/129 EC on the Packaging Directive 94/62/EC.

Technical Data:

1. Component A + B:

Colour:	anthracite, yellow, white, beige, grey
Density:	approx. 1.92 g/cm³

2. Working time:

a) Mixture of 100 g component A + 50 g component B

at 20°C:	100 - 120 minutes
at 30°C:	45 - 50 minutes
at 40°C:	20 - 25 minutes

b) At 20°C and different quantities

20 g component A + 10 g component B:	130 - 150 minutes
50 g component A + 25 g component B:	110 - 130 minutes
100 g component A + 50 g component B:	100 - 120 minutes
300 g component A + 150 g component B:	85 - 95 minutes

3. Theoretical coverage:

Breadth of stripes	Height of stripes	Running meter/cartridge
10 mm	1 mm	38 m
20 mm	1 mm	19 m
50 mm	1 mm	7.6 m
10 mm	2 mm	19 m
20 mm	2 mm	9.5 m
50 mm	2 mm	3.8 m

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

Technical Data Sheet

The theoretical coverage is reduced by material loss during work and use of several mixing nozzles.

4. Accessories
   - Marking Adhesive Tape for AKEPOX® 4050 Anti-Slip Mix (thickness 1 mm, width 20 mm, length 2 x 50 m on a roll)
   - Diamond Grinding Pad, grain 60

5. For visual stripes according to DIN 18040/part 1
   Theoretical determination of the light reflectance value (LRV) by assigning the AKEPOX® 4050 colours (tread) as well as the AKEMI® Lettering Colour Sprays (riser) to the RAL CLASSIC colours:

AKEPOX® 4050 colour	Corres-ponds aprox. to RAL colour no.	RAL colour name	Light reflectance value (LRV)	recommended AKEMI® Lettering Colour Spray colour	RAL Colour name	Corres-ponds aprox. to RAL colour no.	Light reflectance value (LRV)
beige	1015	light ivory	67	n.a.	-	-	-
yellow	1023	traffic yellow	54	colza yellow	colza yellow	1021	54
grey	7042	traffic grey A	31	n.a.	-	-	-
anthracite	9005	jet black	4	black	jet black	9005	4
white	9016	traffic white	87	traffic white	traffic white	90016	87

Storage: If stored in dry and cool condition (5-25°C/41-77°F) in its closed original container at least 2 years 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 · info@akemi.de · www.akemi.com