Technical Instruction Sheet

Characteristics: AKEPOX® 4050 coloured or phosphorescent is a gel-like, two-component solvent free adhesive, based on epoxy resins with a modified polyamine hardener. AKEPOX® 4050 Anti Slip Mix phosphorescent meets the requirements of DIN 67510 part 4 with respect to luminescence of 10 – 60 minutes. The product is characterised by the following properties:

- cartridge system provides easy dosing and mixing
- easy spreading because of it's smooth consistence
- can be applied without flute on the stone
- very little shrinkage during hardening
- very weather resistant
- very high stability in contact with alkalis and therefore very suitable for bondings with concrete
- non-slipping characteristic (R11) despite closed surface, enabling easy cleaning.
- good adhesion on mineral surfaces and highly non-abrasive
- no tendency towards crystallisation, therefore no problems with storage and good safety during processing
- Luminescence density of Akepox 4050 Anti Slip Mix phosphorescent meets the minimum requirements according to DIN 67510 part 4.

Field of Application: AKEPOX® 4050 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 in entrance areas that are exposed to water and/or sloping. AKEPOX® 4050 is suitable for silicate bounded natural stone (e.g. granite) indoor and outdoor, on limestone and marble only indoor. Due to luminescence properties the safety is increased in case of electrical power failure in areas which are artificially illuminated.

Instructions for Use:

- without mixing nozzle: applicable as dosing tool
- with mixing nozzle: dosing and mixing tool all in one

1. Thoroughly clean the completely dry surface. Mark off the area to be bonded with AKEMI 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.
3. When using without mixing nozzle, thoroughly mix both components.
4. Apply a layer of the product at a thickness minimum 1mm and max. 2 mm. 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 min (20°C/68°F). After approx. 3-5 hrs (20°C/68°F) the surfaces are dry but optimal curing takes 12-16 hrs (20°C/68°F). Foot traffic may be resumed after 8-10 hours. Maximum stability after 7 days.
6. Tools can be cleaned with AKEMI Nitro-Dilution
7. Warmth accelerates and cold retards the hardening process.
8. If stored in a cool place, approx. shelf life is at least 1 year.

Special Hints:

- 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.
- For hand protection use AKEMI Liquid Glove
- The adhesive is no longer to be used if it has already thickened or is jellifying.
- The product is not to be used at temperatures under 15° C because it will then insufficiently harden.
- The hardened adhesive can no longer be removed by means of solvents. This can only be achieved mechanically or by applying higher temperatures (> 200° C).
- If the adhesive has been correctly worked it presents no hazard to health when the hardening process is completed.
- use only original AKEMI mixing nozzle
- Acid-containing products (e.g. Concrete Film Remover and 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.

Technical Data:

Component A + B:
colours: anthracite, yellow, white, red-brown, beige, grey or phosphorescent

density: ca. 1,92 g/cm³

2. Working time:

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

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

b) at 20° C with varying amounts

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

3. Shelf life: 1 year approx. if stored in cool place free from frost in its tightly closed original container.

Safety Measures: see EC Safety Data Sheet

Notice: The above information is based on the latest stage of technical progress It is to be considered as a non-binding hint and does not release the user from a performance test, since application, processing and environmental influences are beyond our realm of control.

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