Technical Data Sheet

Properties:

AKEMI® FLEXY-ZEM is a 1-component, polymer-based joint filling material which hardens in contact with atmospheric moisture.

The product is characterized by the following properties:
- appearance of a cementary joint
- suitable for natural stone (no discolouration in the contact zone)
- effective toleration of movement 20%
- skin forming time approx. 12 minutes
- stable at temperatures from -50°C up to +150°
- can be used indoors and outdoors
- high abrasion and tear resistance as well as notch-tensile strength
- fungicidal properties
- emission class A+

Application Area:

AKEMI® FLEXY-ZEM is a special joint filling material for expansion and connecting joint in the field of large-size ceramics, tiles, natural and artificial stone s.a. marble, granite, quartzite, sandstone, terrazzo, concrete and the like. As the appearance is similar to a cementary joint, the product can also be used as a replacement for conventional grouts.

Instructions for Use:

1. Contact surfaces must be dry and clean and free of fat and dust; Cleaning with AKEMI® Cleaner A on natural and artificial stone, tiles, ceramics, glass, non-painted wood and metal. AKEMI® Cleaner I is to be used on plastics and painted surfaces.
2. In order to prevent adhesion on three flanks and in the event of deeper joints, AKEMI® joint cords should be used; closed-cell polyethylene (PE) joint tapes for wet/moist rooms (bathrooms, saunas etc.), for outdoors and areas exposed to permanent humidity, otherwise open-cell polyurethane (PUR) joint cords. Joint size: 6 x 6 mm at the least.
3. Areas flanking the joint should be protected with AKEMI® special adhesive masking tape.
4. In wet/moist rooms and areas exposed to permanent humidity, outdoors and by particular surfaces (see primer table) we recommend the application of our primers on the flanks of the joints.
5. Working temperature +5°C up to +35°C.
6. Apply the product and smoothen within 5 to 10 minutes; An optimal matt effect is achieved with dry smoothing (without using a smoothing agent).
7. Remove the adhesive masking tape in the direction of the joint prior to skin formation.
8. The hardening process, which is dependent upon the thickness of the layer, the temperature and the relative atmospheric humidity, takes approx. 1 - 3 mm per 24 hours.
9. Tools can be cleaned with AKEMI® Cleaner A.

- For professional use only.
- The product should be smoothened as dry as possible to maintain the matt surface effect.
- Discolouration occurs on tar and bitumen coated surfaces as well as on elastomers s.a. EPDM, APTC or neoprene.
- Test the compatibility with the product prior to using it on coated surfaces (e.g. varnishes, paints).
- To avoid staining, do not apply primer on visible surfaces.
- Remove excess smoothing agent to avoid staining.

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- No or limited adhesion on plastics containing plasticizers as well as on PE, PP and Teflon.
- Hardened product can only be removed mechanically, not yet hardened product can be removed with AKEMI® Cleaner A or I, depending on the surface.
- The hardened product is not harmful to health.
- 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:

System:	oxime interlaced
Consistency:	paste-like, stable
Density DIN 53479-B at 23°C:	approx. 1.25 g/cm³
Shore A hardness DIN EN ISO 868:	approx. 37
Effective toleration of movement:	20%
Working temperature:	+5°C - +35°C
Temperature resistance:	-50°C - +150°C
Time to build up skin at 23°C and 50% relative atmospheric humidity:	approx. 12 minutes
Hardening time at 23°C and 50% relative atmospheric humidity:	approx. 1 - 3 mm per 24 h
Elastic modulus 25% elongation DIN EN ISO 8339:	0.52 N/mm²
Elongation at break DIN 53504-S2:	approx. 210%

Quantities required:

joint breadth	joint depth	meter per cartridge
5 mm	5 mm	12
10 mm	10 mm	3
15 mm	10 mm	2
20 mm	15 mm	1

Primer table:

sandstone	*1	AP10	copper	*3	+
limestone	*2	+	brass	*3	+
marble	*2	+	stainless steel		+
granite	*2	+	zinc		AP20
quartzite	*2	+	galvanized steel		+
concrete		AP10	aluminium		+
plaster		AP10	eloxadised aluminium		AP20
brick		AP10	hard PVC		AP30
fibrated concrete		AP10	polyester		+
plaster of Paris		AP10	acrylic bathroom fittings		+
ceramics, glazed/unglazed		+	polyacrylates	*4	+
glass		+	polycarbonates	*4	+
untreated wood		+	formic		AP30
varnished/painted wood*7		+	ABS		+

+	adheres well
*1	coat thinly with Primer AP10 twice
*2	for application in wet/moist rooms or outdoors use Primer AP10
*3	grind the surface with a fine sand paper
*4	the sealing material may cause plastics under surface tension to break; test beforehand!

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*7 test the compatibility of the coating/painting with the sealant by means of preliminary tests

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.

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