Technical Instruction Sheet

Characteristics: AKEMI® PU 20 Joint Sealant is a one-component joint sealing compound on the basis of polyurethane which hardens in contact with air humidity. This product is characterised by the following properties:

- can be used indoors and outdoors
- is weather and age-resistant
- has been tested in accordance with DIN 18540-F
- non-tacky surface
- very good working properties
- good rigidity
- hardens without bubbles
- adheres reliably to the contact surfaces of the joint (please pay attention to the primer table)
- early resistance to rain
- forms a skin in approx. 60 minutes
- low propensity towards yellowing
- temperature-resistant from -30° to +80° C
- low volume shrinkage (1% - 3%)
- subject to quality controls (from the SKZ Würzburg)

Field of Application**:** AKEMI® PU 20 Joint Sealant is a special sealing compound which is used to ensure elastic joint sealings for all expansion joints in the building construction sector. It is also used for connecting joints between metal and concrete construction elements, for facade facing, wood, plaster as well as window and door connecting joints.

Instructions for Use:

1. The contact surfaces must be dry, clean and free of oil, grease and dust: In the case of concrete, clinker and tiles, use Akemi® Cleaner A. Use Akemi® Cleaner I for plastics and painted surfaces.
2. In order to avoid adhesion on three flanks or if you are sealing deeper joints, use Akemi® back-filling cords.
3. Protect the surfaces adjacent to the joint with Akemi® special adhesive masking tape.
4. In the case of outdoor use or in combination with particular base surfaces we recommend you to coat the contact surfaces of the joint with one of Akemi® primers first (please refer to the primer table). If you have treated a base surface with one of Akemi® primers you must wait until it is no longer tacky before applying the sealing compound.
5. Working temperature: +5° C to +40° C (contact surfaces must be dry).
6. Apply the product and smooth it within 60 minutes. Excellent results can be achieved by using Akemi® Universal Smoothing Agent and the AKEMI® Smoothing Rubber.
7. Before a skin forms on the sealing compound, remove the masking tape by pulling it in the direction of the joint.
8. The rate of hardening is dependent upon the thickness of the layer, the temperature and the relative atmospheric humidity. It varies between approx. 1 mm and 3 mm per 24 hours.
9. Tools can be cleaned with Akemi® Cleaner A.

Special Hints:

- Use Akemi® “Liquid Glove” in order to protect your hands.
- In the event of base surfaces which have been coated with bitumen, tar or elastomers such as EPDM rubber, EPT or neoprene, discolorations may occur. For this reason it is recommended to carry out a test first.
- The product is not suitable for use where there is constant water pressure or for joints in swimming pools.
- It is not suitable in areas where it is in contact with chemicals or foodstuffs.
- It is not suitable for natural stone (use Akemi® Marble Silicone instead).
- The colour shades - but not the qualitative characteristics - can be impaired by environmental influences (e.g. UV radiation).
- Sealing compound which has already hardened can only be removed mechanically. If it has not hardened yet, it can be removed with Cleaner A or I, depending on the base surface.
- The hardened sealing material presents no danger to health.
- In order to avoid stains you should not apply Akemi® Primer to visible areas.

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- Remove excess smoothing agent in order to avoid stains.

Technical Specifications:

basis:	polyurethane
consistency:	paste-like, rigid
density (DIN 53479-B at 23° C):	1.30 g/cm³
Shore A hardness (DIN 53505):	15 - 25
effective toleration of movement:	25 %
working temperature:	+5° C - +40° C
temperature stability:	-30° C - +80° C
skin formation time (at 23° C and 50% relative air humidity):	60 - 120 minutes
hardening (at 23° C and 50% relative air humidity):	approx. 1 mm - 3 mm per 24 hours
modulus of elasticity:	0.3 N/mm²
recovery ability:	≥ 85 %
shelf life:	12 months if kept cool and dry in the closed original container

A 600 ml bag (joint width x joint depth)	is sufficient for:
10 x 5 mm	12.0 m
15 x 7 mm	5.7 m
20 x 10 mm	3.0 m
25 x 13 mm	1.8 m
30 x 15 mm	1.3 m
35 x 18 mm	0.9 m

Primer table:

ceramics, glazed/unglazed	+/AP 50*	formic	2
glass	+/AP 50*	copper	AP 50
cast stone	2	brass	AP 50
natural stone	--	stainless steel	+/AP 50*
concrete	+/AP 40*	zinc	+/AP 50*
brick	+/AP 40*	aluminium, bare	+/AP 50*
fibrated concrete	+/AP 40*	eloxadised aluminium	+/AP 50*
gypsum	1	rigid PVC	AP 60
untreated wood	+/AP 40*	polyester	+
varnished wood	+/AP 40*	sanitary acrylics	--
painted wood	+/AP 50*	polyacrylates	AP 60

\+ = adheres well
\- = do not use

* always apply a priming coat when used outdoors
1 = apply AP 40 twice
2 = carry out tests first

Safety Measures: Please refer to the EC safety data sheet

Notice: The above specifications were made on the basis of the present-day stage of technological development as well as the application research of our company. Because the ways and means of application are beyond our control, the manufacturer cannot be made liable for the contents of this specification sheet.

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TIS 12.01