Specification sheet

Properties:

AKEMI® Chemical Resistant Silicone is a one-component, joint sealing material on the basis of silicone rubber which hardens in contact with atmospheric moisture. This product is characterized by the following properties:

- chemically neutral cross-linking
- high resistance against notching
- high resistance against chemicals
- high temperature resistance (up to 270° C)
- very good UV resistance
- excellent working and smoothing properties
- effectively tolerates expansion/contraction up to 25%
- skin formation within approx. 10 - 15 minutes
- extremely good adhesion
- can be stored for 12 months under cool and dry conditions

Application areas:

AKEMI® Chemical Resistant Silicone is a special sealing material for chemical-resistant expansion and connecting joints in breweries, large-scale kitchens, laboratories, car washes etc. and in places where pressure washers are in use. It is also ideal for elastic floor joints which are exposed to high stress in underground and multi-storey car parks as well as storehouses.

Instructions for use:

1. Contact surfaces must be dry, clean and free of grease and dust. Tiles, ceramics, glass and enamel can be cleaned with AKEMI® Cleaner A. Use Cleaner I for plastics and painted surfaces.
2. In order to prevent adhesion on three flanks and in the event of deeper joints AKEMI® back-filling cords should be used: closed-cell, rot-resistant polyethylene (PE) cords for humid rooms (bathrooms, saunas etc.) and for outdoors, otherwise open-cell polyurethane (PUR) back-filling cords. Joint size: 3 x 5 mm at the least.
3. Areas flanking the joints should be protected with AKEMI® special adhesive masking tape.
4. To ensure good adhesion to the various kinds of material, please pay careful attention to the primer table.
5. Working temperature: –5° C - +40° C (it is essential that the flanks are dry).
6. After application the silicone must be smoothed within 10 – 15 minutes. The best results are achieved with AKEMI® smoothing rubber and smoothing agent.
7. The masking tape should be removed by pulling it in the direction of the joint before a skin starts to form.
8. The hardening process, which is dependent upon the thickness of the layer, the temperature and the relative atmospheric humidity, takes approx. 24 hours for 2 - 3 mm.
9. Tools can be cleaned with AKEMI® Cleaner A.

Special notices:

- Before the joint is exposed to mechanical strain, the silicone should be allowed to harden for at least two days.
- When working with pressure washers please observe a minimum distance of 50 cm between the joint and the spray nozzle.
- In the event of floor joints which are wider than 20 mm and which are frequently driven over, protective edge railing should be used without fail.
- In order to protect the hands, use AKEMI® ‘liquid glove‘.
- If the base surface is coated with tar or bitumen problems will arise in respect of discolouration and adhesion. The same applies for elastomers such as EPDM rubber, EPT and neoprene.
- In order to prevent stains the primer should not come into contact with surfaces which are in the field of vision.
- Excess smoothing agent must be removed in order to avoid staining.

- The silicone does not adhere or adheres poorly to plastics containing softening agents such as polyethylene (PE), polypropylene (PP) and polytetraflouroethylene (teflon).
- The silicone does not adhere or adheres poorly to plastics containing softening agents such as polyethylene (PE), polypropylene (PP) and polytetraflouroethylene (teflon).
- Not suitable for sandstone, natural stone and cast stones; danger of discolouration in the contact zone. Use, if possible, AKEMI® Marble Silicone instead.

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- Hardened sealings can only be removed mechanically. Sealing material which is still soft can be removed with AKEMI® Cleaner A or I – depending on the surface below.
- The hardened sealing presents no danger to health.

Technical specifications:

System:	oxime cross-linking
Consistency:	paste-like, stable
Density (DIN 53479-B) at 23°C:	1.2 g/cm^3
Shore A hardness (DIN 53505):	approx. 40
Effective tolerance of expansion/ contraction:	approx. 20 %
Working temperature:	+5° C - +40° C
Temperature resistance:	-40° C - +270° C
Skin formation at 23° C and 50 % relative atmospheric humidity:	10 - 15 minutes
Hardening time at 23° C and 50% relative atmospheric humidity:	2-3 mm per 24 hours
Modulus of elasticity at 100 % stretching:	approx. 1.0 N/mm^2
Tensile stress at break (DIN 53504):	approx. 3.0 N/mm^2
Elongation due to tearing (DIN 53504):	approx. 410 %
Colours:	sanitary grey, dust grey, anthracite
Storage:	can be stored for 12 months under cool and dry conditions.

Primer table:

ceramics, glazed, unglazed	+	stainless steel	+
glass	+	copper	AP 20
tiles	+	brass	+
concrete	+/AP 10	zinc	AP 20
aluminium, untreated	+	rigid PVC	+/AP 30
eloxadized aluminium	+	flexible PVC	AP 30
wood, untreated	AP 10	polyester	AP 30
wood, varnished	+	natural stone	-
wood, painted	+	cast stone	-

\+ good adhesion without primer
\- not usable

Safety notices: Please refer to the EC safety data sheet

Notice: These 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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