



PERMANENTLY ELASTIC SEALANT WITH EXCELLENT ADHESION TO MOST CONSTRUCTION MATERIALS (CONCRETE, BRICK, WOOD, STEEL, ALUMINIUM, CERTAIN TYPES OF PLASTIC - PVC, FOAM CONCRETE, CERAMICS, PLASTERBOARDS, GLASS, KLINKER, METAL, PORCELAIN, STYROFOAM AND ENAMEL) FOR USE IN APPLICATIONS WHERE FIRE RESISTANT SEALANT IS REQUIRED. IT PREVENTS FIRE, SMOKE AND GAS TO SPREAD.

### **PROPERTIES**

- Due to excellent adaptation characteristics this is an ideal product for joints where despite the impact of fire no loss of adhesion should occur.
- For sealing and gluing of joints between various materials (glass, wood, concrete, brick, stone, ceramics, steel, aluminium and most types of plastic) where there is a danger of fire:
  - Joints around fire door,
  - Wall penetrations for cables or pipes,
  - Expansion joints.
- Does not cause corrosion.
- Excellent adhesion to most construction material without primer application.
- Adhesion onto porous surfaces can be improved with the use of TKK SEAL silicone & hybrid primer.
- Good mechanical properties.
- Does not slump in vertical joints.
- Movement accommodation up to 20 %.
- Resistant to atmospheric effects, UV-light and ageing.
- Maintains elastic properties from -40 °C to +180 °C, and in the event of occasional exposure also up to 200 °C.
- Application temperature: between +5 °C and +40 °C.
- Resistant to various chemicals.
- Colour: white, other colours on demand.

# **TESTS AND CERTIFICATES**

EN 15651-1,2,4 CE EN 13501-2 EI 240 V-X-F-W 10 to 20 flammability test

### USE

- For sealing joints where fire resistant sealant is required.
- For sealing around fire door, for sealing around wall/floor penetrations for cables and pipes, for door and window installation, for sealing between plasterboards and concrete elements. Excellent mechanical properties once cured.

#### **TECHNICAL DATA**

## Fresh sealant

Basis		neutral oxime silicone
Appearance		paste
Curing mechanism		by air humidity
Specific gravity		$1290 \pm 10 \mathrm{kg/m^3}$
Skin formation time	23 °C/50 % rel. humid.	7 min.
Hardening time	23 °C/50 % rel. humid.	2 mm/day
Resistance to flow	ISO 7390	0mm

### **Cured sealant**

Hardness Shore A	ISO 868	30-40
Tensile strength	ISO 8339	0.7-0.8 MPa
Module E 100 %	ISO 8339	> 0.4 MPa
Elongation at break	ISO 8339	120-150 %
Tensile strength	ISO 37	1.4 MPa
Elongation at break	ISO 37	250-350 %
Change in volume	ISO 10563	< 10 %
Elastic recovery	ISO 7389	> 90 %

### **APPLICATION**

Prior to use it is recommended to perform an adhesion test to verify adhesion of the sealant to the substrate.

# Surface preparation:

The surface of the joint must be dry, hard, clean, dust and fat free. Remove all separated and badly attached pieces.

## Joint and cartridge preparation:

- If you want joints to look nice tape the edges with a masking tape.
- Cut the cartridge at the top and screw on the nozzle, which has to be cut according to the width of the joint and placed in the gun. During work interruption release the handle on the gun and pull the piston back.
- The sealant should be applied as evenly as possible.
- At the end, use a TKK SEAL smoothing tool a smoothing instrument, or a TKK SEAL Smoothing agent soaped finger to level the sealant before the skin starts to form. It is very important to press the sealant well against the surface to be sealed.
- Remove the masking tape before the sealant starts to harden.
- Fresh sealant and tools can be cleaned with the TKK CLEAN PROTECT tool cleaner, hardened sealant should be removed mechanically first and then with a cleaner for hardened silicone TKK CLEAN PROTECT silicone remover or TKK CLEAN PROTECT universal cleaner.
- For optimal elasticity of a sealant the correct ratio width: depth is of extreme importance. The ratio is 2:1,1:1 maximum. Sealant should not adhere to the bottom of the joint gap but only to its sides. This can be achieved with the use of TKK SEAL Back filling tape or non-flammable materials (fibreglass wool and ceramic fibres). The minimum and maximum joint width is 6 mm and 20 mm, respectively.

Joint depth	Joint width (mm)							
(mm)	6	10	15	20	25	30		
6	8.3							
8		3.7						
10		3.0	2.0	1.5				
12			1.7	1.3	1.0			
15			1.3	1.0	0.8	0.7		
20				0.75	0.6	0.5		
25						0.4		

The table shows how many linear metres
of joints we can seal with one 300 ml
cartridge relative to the width and depth of the joint.

## **PACKAGING**

- 300 ml cartridge.
- 200 l drum.
- Other packagings are available by agreement.

#### **STORAGE**

18 months in a dry and cold place under 25 °C in originally closed packaging.

# **HEALTH, SAFETY HANDLING AND DISPOSAL INFORMATION**

Additional information on safety, safe handling instructions and personal protective equipment as well as disposal information are available in a safety data sheet. Safety data sheet is available upon request. You can also ask your TKK distributor for a copy.

#### **WARNING**

Instructions contained in this document are based on our research and experience, however, due to specific conditions and working methods we recommend that you perform preliminary tests prior to any application of our products.

