



# HIGH ELASTIC SEALANT ON THE BASIS OF A HYBRID MS POLYMER FOR SEALING DILATATIONS JOINTS, WALL PENETRATIONS AND JOINTS IN GENERAL.

#### **PROPERTIES**

- Excellent adhesion on most construction materials concrete, brick, plasterboards, steel, ceramics, metal, most types of plastic, Styrofoam etc.).
- Prevents the formation of mold.
- Good output even at low temperatures.
- Does not slump in vertical joints.
- Excellent mechanical properties, good elasticity and flexibility.
- Environmentally friendly; it is solvent, isocyanate and silicone free.
- It can be applied on moist surfaces.
- Chemically neutral and odourless.
- Can be painted with most paints and varnishes on the basis of epoxy, polyurethane and water.
- Shrinkage during hardening process below 1.5 %.
- Resistant to atmospheric effects, UV-light and ageing.
- Does not cause corrosion.
- Chemical resistance:
- Good chemical resistance to: water, aliphatic solvents, mineral oils, fat, low concentration inorganic acids and bases;
- Poor chemical resistance or not resistant to: aromatic solvents, concentrated acids, chlorinated hydrocarbons.
- Colour: grey RAL 7030 and white; others available on demand.

# **TESTS AND CERTIFICATES**

EN 15651-1,3,4 ISO 846 EMICODE EC 1+ CE fungicide test emissions test

## USE

- For weather sealing of dilatation joints and wall penetrations in construction industry, between prefabricated construction elements, in greenhouses etc.
- Useful in places where joints have to be painted or where silicone sealants are not suitable.
- For sealing structures subject to vibrations.
- For sealing joints between window frames, doors, plasterboards and concrete elements.
- For sealing roof light domes.
- The product is recommended for sealing joints in rooms where mould can form.
- For sealing joints in silos, containers and vacuum system.
- For remedying consequences of leakage.

- For sealing and gluing different materials in the automobile and shipbuilding industry.
- For elastic gluing and sealing in power generation industry.

#### **TECHNICAL DATA**

# Fresh sealant

Base hybrid MS polymer

Appearance paste

Curing mechanism by air humidity Specific gravity  $1470 \pm 10 \text{ kg/m}^3$ 

Skin formation time 23 °C/50 % rel. humid. 20-30 min. Hardening time: 23 °C/50 % rel. humid. 2-3 mm/day

Application temperature between +5 °C and +30 °C

#### **Cured sealant**

Hardness Shore A	ISO 868	15-20
Change in volume	ISO 10563	< 1.5 %
Tensile strength	ISO 8339	0.50-0.70 MPa
Module E 100 %	ISO 8339	0.20-0.40 MPa
Elongation at break	ISO 8339	250-350 %
Tensile strength	ISO 37	1.00-1.30 MPa
Elongation at break	ISO 37	350-450 %
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Temperature resistance between -40 °C and +90 °C

#### **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:

- For good adhesion onto porous materials use TKK SEAL silicone & hybrid primer.
- 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.

## Correct dimensioning of expansion joints

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. The minimum and maximum joint width is 6 mm and 30 mm, respectively.

Joint length (mm)	<b>Joint width (mm)</b> 4 6 8 10 12 15 20								
4				10		10			
6		8.6	6.4	5.2	4.2				
8			4.9	3.8	3.2	2.6			
10				3.1	2.6	2.1	1.6		
12					2,1	1.8	1.2		
15						1.3	1.0		
20							0.8		

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.
- 600 ml sausage.
- Other packagings are available by agreement.

#### **STORAGE**

15 months in dry space at temperature range between +5 °C and +25 °C, in originally closed packaging, sausage 18 months.

# **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.

