KÖSTER
Waterproofing Systems

KÖSTER MS Joint Sealant

Technical Data Sheet J 236

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Fast-curing, highly elastic, one-component, UV-resistant, durable, VOC-free, environmentally friendly joint sealant with very good adhesion to numerous substrates

Features
KÖSTER MS Joint Sealant is an environmentally friendly, high-quality, one-component, UV-stable, highly elastic and durable joint sealant based on MS polymer technology for joints with a width of 4 mm to 20 mm.

It is characterized by excellent adhesion to a wide range of building materials and can be applied to dry and slightly damp substrates. After application, it is rainproof within 30 minutes under normal conditions. The product is virtually odorless, water-resistant at an early stage, permanently elastic and follows joint movements of over 25 %.

KÖSTER MS Joint Sealant combines the positive properties of silicone and polyurethane sealants without their characteristic weaknesses. It is free of silicone, solvents, and isocyanates and therefore does not release CO2 during curing. As a result, the material remains bubble-free when it comes into contact with damp surfaces. It also forms a strong bond on damp surfaces.

It is low odor and can be used in areas where low VOC values are required. The viscosity of the material allows KÖSTER MS Joint Sealant to be applied to horizontal and vertical surfaces.

The material has an extremely low shrinkage and therefore offers high reliability and durability.
KÖSTER MS Joint Sealant is weather and UV resistant. It is resistant to a wide range of chemicals. KÖSTER MS Joint Sealant does not sag, is highly thixotropic, and can be smoothed very well with a squeegee and commercially available smoothing tools.

Advantages
- ready-to-use material (1 component)
- seamless waterproofing layer with easy application
- highly viscous consistency for slopes and vertical surfaces
- adhesion to various substrates
- excellent weather and UV resistance
- environmentally friendly product - can be used on a wide variety of surfaces
- retains its properties at installation temperatures between -30 °C and +80 °C
- Resistant to oils, seawater, cleaning agents and various chemicals
- Resistant to hydrolysis, salts and frost
- solvent-, silicone-, water-, bitumen- and isocyanate-free
- no shrinkage due to solvent leakage during curing
- no cracking due to shrinkage during curing
- can be applied in greater thicknesses than solvent-based sealants
- safe for workers and the workplace, does not produce toxic fumes
- does not react with moisture to form carbon dioxide
- allows application to slightly damp substrates
- does not form bubbles and voids that can lead to cohesive failure

Technical Data

Material base	MS Polymer
Color	light grey (approx. RAL 7040)
Density (+20 °C)	approx. 1.5 g/cm^3
Elasticity	approx. 500 %
Viscosity	350 x 10^3 mPa.s
Consistency	pasty, stable
Skin forming time	2-3 h/mm (according to weather conditions)
rain resistant (+23 °C/65 % rLF)	within approx. 30 Min.
Curing time (+23 °C/65 % rLF)	min. 8 h - max. 24 h
Application temperature	+5 °C - +35 °C (Air temp.)
Operating temperature	-30 °C - +80 °C
Max. Expansion	25 % referred to initial width

Fields of Application
KÖSTER MS Joint Sealant is a highly elastic MS polymer-based waterproofing material with excellent elasticity, which is characterized by high UV and weather resistance and excellent adhesion to various interior and exterior building materials.

For use in parallel and perpendicular joints ("triangular joints").

It is used for all types of joints in the area of windows and doors in building construction and other construction areas such as
- Joints in concrete and brick components
- Joints in the area of various building elements
- Joints around roof installations
- Comparable joints in building construction and other components

Due to its excellent adhesion to most substrates (including masonry, concrete, screed, PVC-U (rigid PVC), PP, PE, FRP, plastics and metal (except copper) and its high elasticity, it is not only ideal for sealing joints of almost all types in the construction industry, but also against the attack of various chemicals.

Substrate
The air and substrate temperature must be +5 °C for at least 24 hours after application. All surfaces must be perfectly clean, dry and free of dust, grease and oil.

Absorbent substrates such as concrete or other absorbent substrates must be primed in advance with KÖSTER CT 121. On non-absorbent substrates such as tiles, brittle plastics - mainly oxidized aluminium or galvanized sheet steel and rigid PVC profiles (various plastics, e.g. PE, PP, GRP) or metals, the surface must be roughened with an abrasive sponge (e.g. Scotch Brite) and cleaned with alcohol. Apply KÖSTER PU 120 as a primer thinly and evenly with a lint-free cloth (consumption approx. 30-50 g/m^2).

PE, PP, PC, PMMA, PTFE plastics as well as soft PVC or neoprene or

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EPDM are not suitable as a primer. Do not apply to damp or frozen substrates. Not for use in permanent contact with water and in chlorinated environments such as swimming pools. Do not use on substrates containing bitumen, plasticizers and solvents.

For critical substrates or substrates made of unknown materials, hydrophobic components, on natural and artificial stone or substrates with an unknown layer that must not be removed (e.g. coatings), it is recommended to carry out adhesion and compatibility tests in advance.

Application
KÖSTER MS Joint Sealant is applied to the prepared substrate without air bubbles using the KÖSTER hand gun without attachment or a suitable disc press for tubular bags. Cut off the sealing clip of the tubular bag on one side, place the tubular bag in the press and start application.

In the event of longer work interruptions, remove the tubular bag and remove hardened material. Homogeneous liquid material can continue to be used.

To test the curing time, always apply an approx. 5 cm long strand to a wooden board or similar on site. Low temperatures delay the curing process, high temperatures accelerate the curing process.

Continuous joint edges ("triangular joints", e.g. connections to built-in parts such as doors or windows, etc.) can be applied directly. In the case of parallel joint edges (e.g. movement or separation joints), the depth of the joint must be limited, e.g. using a commercially available closed-cell round cord. This also prevents the so-called three-flank adhesion. The backfill profiles used must be suitable and must not have any separating properties. Joint widths up to 10 mm are filled with a width/height ratio of 1:1. Joints up to 20 mm are to be filled at a width/height ratio of 2:1.

The edges of the joint must be taped to ensure a clean boundary. These must be removed again immediately after smoothing.

For smoothing, a commercially available smoothing liquid is used in the smallest possible quantities to avoid discoloration of the sealant and the treated substrates. Smoothing tools (spatulas, jointing irons, etc.) wetted with smoothing liquid should be used for smoothing.

Aftertreatment
Smooth the jointing material with a suitable joint smoothing tool.

Consumption
approx. 1.5 kg/l void

For parallel joints of 10 x 10 mm, one 600 ml tubular bag is sufficient for approx. 6 m of joint.

Joint width (mm)	4	7	10	11	15	20
Joint thickness (mm)	4	7	10	5,5	7,5	10
Consumption (ml/m)	16	49	100	69,5	112,5	200

For triangular joints with a side length of 10 mm, one 600 ml tubular bag is sufficient for approx. 12 m of joint.

Leg length (mm)	4	6	8	10	12	14
Consumption (ml/m)	8	18	32	50	72	98

Cleaning
Immediately after use with KÖSTER Universal Cleaner.

Packaging

J 236 600	900 g in 600 ml foilbags

Storage
Store frost-free at temperatures between +5 °C and +25 °C. Can be stored for a minimum of 12 months in originally sealed containers. Use opened containers immediately.

Safety
Wear protective gloves and safety goggles. Observe all local, state, and federal safety regulations when processing the material.

Related products

KÖSTER CT 121	Prod. code CT 121
KÖSTER PU Primer 120	Prod. code J 138 250
KÖSTER Special Caulking Gun without extensions	Prod. code J 983 001

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