

SPECIAL SEAL WD-1K



- > Liquid sealant for roofs and structures
- > Compound sealing under tile coverings (AIV-F)
- > Can be used vertically and horizontally
- > Ready-to-use
- > Can be applied to matt damp substrates



Product description

High-quality, flexible, single-component, ready-to-use, plasticizer, solvent, silicone and isocyanate-free, permanently elastic and weather-resistant sealant based on silane-modified polymers (SMP) tested for roofs and buildings, and suitable for all indoor and outdoor waterproofing work. With a general building authority test certificates (abP) certifying its suitability as a composite seal under tile coverings for classes W0-I to W3-I with chemical stress according to DIN 18534 (application area/stress class C). Universally applicable on mineral, absorbent and matt damp substrates as well as on non-absorbent substrates. Waterproofing for various horizontal and vertical floor and wall areas, such as flat and pitched roofs, swimming pools, terraces, balconies or pergolas, cisterns, fountains, bathrooms, commercial kitchens as well as technical rooms, pump sumps, evaporation channels or lift shafts. Windproof sealant for blower door tests in low-energy and passive homes at connection points, such as window and door soffits and various pipe penetrations.

Delivery format

Container	Outer packaging	Pallet
13 KG / KE	-	36 KE
5 KG / KE	-	54 KE

Storage

Can be stored frost-free, cool, and dry on wooden shelves in the unopened original container for 540 days

Processing

Recommended tools

Roller, brush, airless application.

Clean tools with Murexin acetone after use.

Processing

Special Seal WD-1K is single-component and is therefore ready to use, but should be stirred before use. Special Seal WD-1K should always be applied over the entire surface using suitable tools, regardless of the intended use. Depending on temperature and humidity, the pot life is approx. 30 - 40 minutes.

Processing as a structural seal

The sealing membrane is produced with fleece reinforcement in accordance with standards. Following the application of any necessary adhesion promoters, Special Seal WD-1K is applied with an application tool suitable for the respective application. The consumption of the material is approx. 1.8 kg/m².

Needle Fleece NV 110 is embedded in the freshly applied sealing resin without bubbles or wrinkles and then covered with Special Seal WD-1K so that no fleece is visible and no part of the surface is matt in appearance. The consumption of the fleece covering is approx. 0.9 kg/m².

Internal or external corners are formed with Murexin NV 110 VI and Murexin NV 110 VA. For sealing work with difficult geometries, the required shapes can be cut from Needle Fleece NV 110. The individual fleece panels or the connections to other fleece mouldings should overlap by at least 5 cm.

Connections to other materials must always overlap by at least 10 cm.

Revision of Special Seal WD-1K

- a) Before sealing work can be continued, Special Seal WD-1K is to be cleaned with Murexin acetone after each instance of rain or in the event of soiling.
- b) When re-working Special Seal WD-1K after 24 hours, the following steps must be observed:
 - The surface or connection area is to be cleaned with Murexin acetone
 - The solvent must be left to dry for at least 20 minutes at 20 °C before subsequent work is carried out
 - Application of special sealant WD Top+, which forms a film but is opaque
 - After the WD Top+ special sealant has dried, Special Seal WD-1K can be applied

Both the seal and any wear layer must be protected from increased mechanical and chemical stress until they have hardened completely.

Processing as compound sealing under tile coverings (AIV-F)

When tiles are laid, we recommend using it as a composite seal (AIV-F) in commercial kitchens, swimming pools, on balconies and walkways, porches, as well as in bathrooms, showers and all other wet rooms. Special Seal WD-1K has been tested for all classes of water contamination according to DIN 18534, including for areas with additional chemical contamination – confirmed by building inspectorate approval (abP).

Ready-to-use Special Seal WD-1K is to be completely applied with a lint-free medium pile roller. After a reaction time of about 5 - 7 hours, a second layer is applied as a bedding layer and sanded with excess quartz sand QS 98, grading line 0.6 -1.2 mm. The excess quartz sand must be removed before bonding. After a further waiting time of about 6 - 8 hours, the tile covering can be laid as usual with tile adhesive, e.g. Flex Adhesive Mortar Grey KGF 65.

Vertical or horizontal component connections must be secured by embedding with sealing tape DB 100, internal or external corners or sealing sleeves. Reinforcement of the surface sealing is not necessary. For connections to pipes or gutters or other penetrations, reinforcement with needle fleece NV 110 is recommended.

The minimum layer thickness (total of two layers) is 1 mm (consumption approx. 1.4 kg/m² for 1 mm layer thickness).

The sealing layer must be protected from increased mechanical and chemical stress until completely hardened.

Technical data

Chemical base	silane-modified polymer
Density	1.34 g/cm ³
μ value	521
sD value	approx. 1 metre at 2 mm layer thickness
Colour	white, light grey, dark grey
Consumption	as a structural seal 2.7 kg/m ² /2 mm as a compound seal (AIV-F) 1.4 kg/m ² /1mm
Layer thickness	dry layer thickness 1 mm as a composite seal (AIV-F) dry layer thickness 1.8 to 2.4 mm as a structural seal
rainproof	approx. 30 minutes (20°C/50% RLF) after application
Open time	approx. 30 - 40 minutes (20 °C/50 % RLF)
Can be walked on	after approx. 5 hours (20 °C/50% RLF)
Certificates/test reports/class achieved	ETA according to EAD 030350-00-0402; approval according to food law; hail test; rhizome and root resistance test according to EN 13948; GEV-Emicode; DIN 18534
Shore D hardness	45 (28 d)
Heat-resistant	short-term heat resistance up to 250 °C
Chemical resistance	see Annex
Object and material processing temperature	0 °C - 35 °C
Permissible relative air humidity	99%
Rainproof	immediately after application
Fire behaviour according to EN 13501-1	Class E
Useful life	W3
Climate zones	M and S
Imposed loads	P1 to P4

Test certificates

Tested in accordance with (standard, classification ...)

EC1ETA according to EAD 030350-00-0402; approval according to food law; hail resistance HW 7; root resistance according to EN 13948; GEV EMICODE EC1 Plus.

Substrate

Suitable substrates

The substrate must be load-bearing and free of separating, intrinsic and foreign substances or other substances normally found on building sites that have a negative effect on allowing a sufficient adhesive bond.

Ridges or sharp-edged bumps should be removed before applying the sealing resin, and edges should be chamfered. Defects such as depressions, masonry joints, mortar pockets, gravel pockets or even deeper breakouts and cavities in the substrate should be filled, levelled or reprofiled beforehand with Murexin mortars or, if necessary, concrete repair products.

Substrate pre-treatment is to be undertaken via suitable mechanical processes. Non-absorbent substrates are to be cleaned with Murexin acetone.

Product and processing instructions

Material instructions:

- When working outside the ideal temperature and/or humidity range the material properties may change significantly.
- Bring materials to correct temperature before processing!
- To retain the product properties, no foreign materials may be mixed in!

Environmental information:

- Do not process at temperatures below + 5°C!
- The ideal temperature range for material, substrate and air is +15°C to +25°C.
- The ideal relative air humidity range is between 40 % to 60 %.
- Increased humidity and/or lower temperatures delay, lower air humidity and/or higher temperatures accelerate drying, setting and hardening.
- Ensure sufficient ventilation, especially indoors, during the drying, reaction and hardening phase.
- Protect adjacent components!

Tips:

- We highly recommend using a test surface first or a small area for initial small-scale testing.
- Observe the product data sheets of all MUREXIN products used in the system.
- Keep a genuine original container of the respective batch for later repair work.

The information provided reflects average values that were obtained under laboratory conditions. Due to the use of natural raw materials, the indicated values of individual deliveries may vary slightly without impacting the product suitability.

Safety instructions

Please refer to the safety data sheet for product-specific information with regard to composition, handling, cleaning, appropriate measures and disposal.

Limiting and monitoring exposure

Personal protective equipment:

General protection and hygiene measures:

- Keep away from foodstuffs, beverages, and feedstuffs.
 - Take dirty, soaked clothing off immediately.
 - Wash your hands before breaks and after finishing work.
- Respiratory protection: Not required with good room ventilation.

Hand protection: Protective gloves.

Glove material

- The selection of a suitable glove depends not only on the material, but also on other quality properties, which may vary from manufacturer to manufacturer. As the product is a preparation made up of many materials, the resistance of glove materials cannot be predicted in advance and must, therefore, be checked before use.

Penetration time of the glove material

- The precise penetration time must be ascertained from the glove manufacturer and it must be observed.

Eye protection: Protective goggles recommended during decanting.

Body protection: Wear protective clothing.

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Please observe the current, technical, national and European standards, guidelines and data sheets regarding materials, substrates and the subsequent construction. Please contact us if you have any reservations or doubt.

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