# **TECHNICAL DATA SHEET**

Sealing Technology

# SPECIAL SEAL WD-1K

- > liquid sealer for roofs and buildings
- > for indoor and outdoor use
- > can be used vertically and horizontally
- > ready for processing
- > can be applied to slightly damp substrates



#### **Product description**

High-quality, flexible, single-component, ready-to-use, water-, solvent-, silicone- and isocyanate-free, elastic and weatherproof sealer for roofs and buildings suitable for indoor and outdoor sealing work and compatible with various types of surface materials such as natural stone carpets, ceramic coverings, mineral flow-mortars, etc.

All-purpose sealing for interior and exterior use on mineral, absorbent and slightly moist 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 sealer for blower door tests in low-energy and passive homes at connection points such as window and door reveals and various pipe penetrations.

#### **Delivery format:**

Container	Outer packaging	Pallet
13 KG / KE		36
3 KG / KE		90

#### Storage:

Can be stored in a frost-free, cool and dry place on wooden shelves in the original unopened container for approx. 6 months.

# Processing

#### **Recommended tools:** Roller, brush, airless sprayer. Clean tool with acetone after use.

#### **Processing:**

This is a single-component product and thus ready for use. No mixing is required. During processing, the special seal WD-1K must be applied over the entire surface with the appropriate tool for the application. Depending on temperature and humidity, the pot life is approx. 30 - 40 minutes.



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The sealing membrane is manufactured with fleece reinforcement in accordance with standards. Following the application of any necessary adhesion promoters, the 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/m<sup>2</sup>. The Murexin needle fleece NV 110 is embedded in the freshly applied special sealing resin, free of bubbles and wrinkles, and then covered with the special sealing resin WD-1K, so that fleece is no longer visible. Approx. 0.9 kg/m<sup>2</sup> is consumed to cover the fleece layer.

Internal or external corners are formed with Murexin NV 110 VI and Murexin NV 110 VA.

Overlap the individual fleece panels or the connections to other fleece mouldings by at least 5 cm. Connections to other materials must always overlap by at least 10 cm.

To achieve a chemical/mechanical bond for subsequent coverings, e.g., tile coverings, coatings, flow-mortars, et cetera on the previously manufactured sealing membrane, its surface must be professionally cleaned with Murexin acetone within a period of max. 18 hours after preparing the sealing membrane. Once the acetone has evaporated completely, treat the wear layer/receiving layer with the special seal WD-1K, consuming approx. 0.7 kg/m<sup>2</sup>, and sand any surplus material with fire-dried quartz sand of 0.6 - 1.2 mm.

In case of exceeding the above described time frame for recoating, a special adhesion agent developed by Murexin is to be used for intermediate adhesion. Further information can be found in the Technical Data Sheet "Murexin Bonding Agent HV 2" or in the product and processing instructions.

Tools can be cleaned after use with Murexin acetone.

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

#### **Technical data**

Can be walked on	after approx. 8 hours
Chemical base	polymer hybrid
Density	1.34 g/cm <sup>3</sup>
Colour	light grey/white
Consumption	approx. 2.7 kg/m <sup>2</sup> for a layer thickness of 2 mm or conforming to
	norm-specific requirements
μ value	approx. 660
Shore-A hardness	45 (28 d)
Chemical resistance	see Annexe
Open time	approx. 30 - 40 minutes (20°C/50% RLF)
rainproof	approx. 30 minutes (20°C/50% RLF) after application
Layer thickness	depending on requirements between 1.8 and 2.4 mm required
Drying time	approx. 5 hours
Recoatability	after approx. 8 hours
Processing temperature	0°C - +35°C
Rainproof	immediately after application
Fire behaviour according to EN	Class E
13501-1	

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# **Test certificates**

Tested in accordance with (standard, classification ...) EC1

#### Substrate

#### Suitable substrates:

The substrate must be load-bearing and free from separating, inherent or foreign substances or other impurities commonly found on construction sites that could have a negative effect on the adhesive bonding.

Ridges or sharp-edged bumps should be removed before applying the sealing resin. Defects such as recesses, brick joints, mortar or gravel pockets, or even deeper excavations and cavities in the substrate should be filled, levelled or reprofiled with Murexin concrete repair products beforehand.

Substrate pre-treatment is carried out by suitable mechanical processing and by cleaning with Murexin acetone or Murexin alcohol.

#### For a perfect system

System products:

Murexin concrete repair products, Murexin surface systems

#### 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.



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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.

This leaflet is based on extensive experience, is intended to convey the best of our knowledge, is not legally binding and does neither constitute a contractual legal relationship nor a subsidiary obligation resulting from the bill of sale. The quality of our materials is guaranteed within the framework of our general terms and conditions. Our products may be used by professionals and/or experienced and accordingly technically skilled persons only. Users are not released from inquiring in case of uncertainties or from rendering professional workmanship. We recommend using a test surface first or a small area for initial, small-scale testing. Naturally, it is not possible to describe or foresee all possible current and future uses and peculiarities. Information that is assumed to be familiar to experts has been omitted.

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. This version is rendered invalid if a new version is released. The most recent data sheets, safety data sheets and the terms and conditions are available online at www.murexin.com.