DS 500

Fibre-reinforced compound for rough levelling of thick layers
GISCODE ZP1 – chromate-reduced per TRGS 613 · EN 13813 CT–C40–F10

Characteristics

- Time savings when working on large areas
- Ideal for levelling, versatile use
- Extremely low stress, self-levelling
- Excellent absorbency, highest strength values
- Corrects planning errors caused by incorrect screed heights
- GISCODE ZP1 – chromate-reduced per TRGS 613
- For use with retrofitted underfloor heating systems
- For processing studded panel systems such as Uponor, Roth, Schlüter

Application

- Filling, smoothing and levelling of cement and calcium sulfate screeds (DIN 18354/18560)
- Suitable for use with all types of floor coverings, including parquet
- For levelling rough unevenness
- Thick-layer levelling for indoor use
- For heavy-duty conditions
- Can be used as a bonded screed replacement
- Suitable for direct bonding of ceramic tiles
- Ideal for renovation projects, pumpable
- The pipe coverage of the respective heating systems must be observed

Technical data

Consumption	approx. 1.8 kg/m²/mm
Mixing ratio	Smooth, self-levelling mortar: 3.5–4.0 l water + 25 kg DS 500
Layer thickness	5 to 50 mm
Open time	approx. 30–40 minutes at +18 °C
Processing temperature	Optimum +10 °C to +23 °C (substrate min. +15 °C); relative humidity preferably 45–65 %, max. 75 %. High temperatures accelerate, low temperatures slow down setting.
Foot traffic	after approx. 2 hours
Ready for installation	Drying time approx. 24 hours for thicknesses up to 15 mm and 2 days for thicknesses over 15 mm (at +18 °C / 50 % r.h.); drying takes longer at higher humidity
Classification	EN 13813 CT–C40–F10 · Fire behaviour A1fl · Release of corrosive substances CT · Compressive strength class C40 · Flexural strength class F10

Substrate preparation

The substrate must be compression- and tension-resistant, free of cracks, load-bearing, permanently dry and free of dirt and separating agents. It must comply with VOB DIN 18 365 and the applicable standards and guidelines. The substrate must have sufficient strength to absorb the stresses and dimensional changes that may arise from installation materials and coverings. A suitable primer is required to prevent insufficient strength and cracking. Loose particles and slurry layers must be removed by shot blasting or milling. To prevent sound bridges from direct contact with vertical building elements, perimeter strips must be installed. Expansion joints must be carried through with matching joint profiles. All defects must be reported.

For layer thicknesses of 25 mm or more, shrinkage joints must be installed. Areas must be divided into sections of max. 50 m². The maximum side length must not exceed 8 m.

Primers

- Cement screeds, concrete: up to 10 mm – Unigrund Express; over 10 mm – PS-Grund 300 (sanded), EP-BA 500 (sanded)
- Calcium sulfate screeds, e.g. calcium sulfate boards FLOOR and more® comfort: up to 10 mm – Unigrund Express; over 10 mm – PS-Grund 300 (sanded), EP-BA 500 (sanded)

References

- Information on cutting underfloor heating pipes into existing screeds can be found in the publication Schnittstelle Fußboden (June 2025)
- BEB checklist NB3 – Pipe systems on existing substrates in levelling compounds / screed
- Interface coordination for surface heating and surface cooling systems in existing buildings

Processing recommendation

Mix the powder into cool, clean water until a homogeneous, lump-free mixture forms. Over-watering causes sedimentation and unstable surfaces. A mixer running at approx. 600 rpm is recommended. Then pour out the levelling compound and spread it with a trowel or screed squeegee. Flat surfaces are easily achieved with a squeegee. Deaerating with a spiked roller and smoothing out trowel marks is recommended. For large-area levelling work, the levelling compound can be processed efficiently with a mortar mixer and pump. If the system is left standing for more than 30 minutes, the hoses must be cleaned. Avoid draughts and intense sunlight during the setting process. Loss of moisture that is too rapid leads to “burning”; the surface becomes crumbly and shrinkage cracks may occur. Depending on the floor covering, a fine layer of WULFF AM 10 Pro levelling compound may be required after drying. If the compound is sanded after drying, the surface must be vacuumed thoroughly before any subsequent bonding work.

Storage

Store in a cool, dry place. Shelf life 6 months. Reseal opened containers airtight immediately. Production date (month and year): see stamp.

Disposal

Only fully emptied paper bags should be recycled. Collect product residues, mix with water and allow to harden. Once hardened, material residues can be disposed of as household waste. Commercial disposal: EWC code 170904 (construction and demolition waste).

Packaging sizes

25 kg bag

Notes

Composition: combination of cement with re-dispersible polymer powder, additives and mineral fillers. Reacts alkaline with moisture, pH approx. 11. Prolonged skin contact increases the risk of serious skin damage. Keep out of reach of children, whether as fresh adhesive or laying material, or in its original packaging. Use only in well-ventilated areas. Do not eat, drink or smoke while using this product. Do not allow to enter drains, watercourses or soil. Wear protective gloves / protective clothing / eye protection. Avoid contact with eyes, skin or clothing. After use, wash tools thoroughly with soap and water. In case of skin contact: wash with plenty of soap and water. In case of eye contact: rinse cautiously with water for several minutes; remove contact lenses if present and easy to do; continue rinsing. If eye irritation persists: seek medical attention.

General / disclaimer

The above information, in particular the suggestions for processing and using our products, is based on our knowledge and experience. WULFF primers, fillers and adhesives are tested only as part of a system. Due to varying materials and working conditions beyond our control, we recommend carrying out sufficient in-house tests in every case – particularly when used in combination with third-party products – to ensure the suitability of our products for the intended processes and applications. No liability can be derived from this information or verbal advice unless we are proven to have acted with intent or gross negligence. Please refer to the Technical Information, the Safety Data Sheet and our Terms of Delivery and Payment. Floor manufacturer instructions take precedence. Publication of this Technical Data Sheet renders all previous editions invalid.
DS 500 – English edition based on the manufacturer's 09/2026 data sheet.