



Technical Data



WEIDU WD-850

Advanced Two-component Epoxy Ceramic Tile Grout

Product Description

WEIDU™ WD-850 Two-component Epoxy Ceramic Tile Grout is a high-performance, solvent-free grout designed for tile joint sealing and decoration. Formulated with high-purity epoxy resin and a modified curing system, it delivers excellent adhesion, high hardness, and superior resistance to water, stains, chemicals, and mildew (Grade 0).

Once cured, it forms a dense, durable, and smooth surface that is resistant to yellowing and suitable for a wide range of applications, including residential and commercial spaces such as kitchens, bathrooms, living areas, and balconies. Its low-VOC, environmentally friendly formulation ensures safe indoor use while providing long-lasting aesthetic and functional performance.

Features

- ☑ Excellent adhesion strength
- ☑ Grade 0 anti-mold performance
- ☑ High hardness and durability
- ☑ Low water absorption preventing moisture penetration
- ☑ Superior stain and chemical resistance
- ☑ Excellent yellowing resistance
- ☑ Wide temperature resistance – Suitable for -30°C to 80°C environments
- ☑ Eco-friendly formulation

Conforms, Meets & Exceeds

Main Components

WEIDU™ WD-850 Two-Component Epoxy Ceramic Grout has been internally tested and is designed to meet or exceed the test requirements of: GB 18583-2008, GB 30982-2014

Typical Properties-Uncured

Information on this data sheet can change without notice, and it is therefore not recommended that these figures be used in spec writing. If you have any questions, please contact manufacturer's sales and technical service department.

Component A: High-purity epoxy resin, pigments & fillers (titanium dioxide / quartz sand), special additives

Component B: Modified aliphatic amine curing agent, accelerator, stabilizer

Basic Physical & Chemical Indexes (Standard environment: 25°C)

Property	Value	Test Method
Appearance (Component A)	Uniform paste, no agglomeration, no particles	Visual inspection
Appearance (Component B)	Uniform paste, no delamination	Visual inspection
Mixing Ratio (A:B)	1:1 (by volume)	Dosage measurement
Density (25°C)	1.2–1.6 g/cm ³	GB/T 13354
Viscosity (25°C, Component A)	e.g. 50000–80000 mPa·s	GB/T 2794
Working Time (after mixing)	20–60 min	Manual application test
Surface Drying Time (25°C/50% RH)	1–2 h	GB/T 1728
Through Drying Time (25°C/50% RH)	24 h	GB/T 1728
Full Curing Time	7 d	Performance test



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Performance Indexes After Curing (Fully Cured)

Property	Value	Test Method
Shore D Hardness	≥70	GB/T 2411
Tensile Adhesive Strength (Tile - Tile)	≥1.2 MPa	GB/T 14074
Elongation at Break	≥8%	GB/T 1040.2
Water Absorption (24 h)	≤0.5%	GB/T 1034
Mildew Resistance Grade	Grade 0	GB/T 1741
Yellowing Resistance Grade (UV Exposure)	≥ Grade 4	GB/T 23984
Temperature Resistance Range	-30°C to 80°C (Long-term)	High-Low Temperature Cycle Test
Chemical Resistance	Resistant to weak acid, weak alkali, neutral detergent immersion; no peeling or flaking	GB/T 9276

Application Guide

- Suitable Substrates

*Applicable Materials: Ceramic tiles, ceramic mosaic, natural stone (marble/granite), glass, metal, mosaic and other smooth/matt surfaces.

*Applicable Areas: Living room, bedroom, kitchen, bathroom, balcony, underfloor heating area, commercial spaces (hotel/office).

- Forbidden Scenarios

Not for long-term water immersion environments (swimming pools, indoor fish ponds).

Not for areas in direct contact with open flames (directly above stove open flames).

Not for undried substrates (moisture content > 8%) or oily/unclean surfaces.

Not for construction at temperature < 5°C or humidity > 85%.

- Key Construction Steps

*Substrate Preparation: Remove dust, oil and water from gaps. Ensure dry and clean joints. Joint depth ≥ 2 mm, joint width 2–10 mm.

*Mixing Ratio: Strictly weigh according to A:B ratio. Mix thoroughly with an electric mixer (mixing time ≥ 3 min) to avoid incomplete mixing.

*Application: Inject mixed grout evenly into joints with a caulking gun and fill fully. Remove excess material and smooth joints within surface drying time (1–2 h).

*Curing Requirements: Keep ventilated after application. Avoid scratches and impacts. No walking or water contact within full curing period (7 d).

Environmental & Safety Instructions

Test Item	Standard Requirement	Test Standard
VOC Content	≤60 g/L	GB 30982
Free Formaldehyde	≤5.0	GB 30982
Benzene, Toluene	+≤150	GB 30982
Free TDI	*****	GB 18583
Heavy Metals(Pb/Cd/ Hg/Cr)	Metals complies with limites in GB 18583	GB 18583

Safety Precautions

*Wear rubber gloves and goggles during construction; ensure good ventilation.



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*Avoid direct skin contact. In case of accidental contact, rinse immediately with water. If splashed into eyes, flush with plenty of water and seek medical attention.

*Uncured product is strictly prohibited from contact with food. Store leftover materials sealed and away from children.

*Dispose of waste packaging/ materials in accordance with local solid waste regulations; do not discard randomly.

Storage and Transportation

*Storage Conditions: Sealed and stored in a cool, dry and ventilated warehouse at 5–25°C. Avoid direct sunlight and rain.

*Transportation Requirements: Transport as non-dangerous goods. Avoid severe impact, extrusion and package damage during transportation.

*Precautions: Reseal any unused product after opening and use as soon as possible to prevent moisture and contamination.

Supplementary Notes

*The data in this Technical Data Sheet are test results under standard environment. Actual performance may vary slightly due to differences in construction environment, substrate material and construction process.

*For customized products for special scenarios (e.g. alpine, high salt spray environment), please contact the manufacturer's technical department for exclusive solutions.

*The manufacturer reserves the right to optimize product technical parameters. Any updates will be notified separately, and the latest version is available through official channels.

Warning Information

WEIDU™ warrants that its product complies, within its shelf life, to its specification.

If any responsibility were to be considered ours, this would be only for any damages and for the value of the merchandise supplied by us and used by the customer. It is understood that we warranty the irreproachable quality of our products in accordance with our General Conditions of Sales and Supply.

Liability

The information in this document, in particular recommendations regarding the application and final use of our products, is given in good faith based on our knowledge and is the result of tests and experience and is intended as guidelines. It is the responsibility of the user to determine whether the product is suitable for their application. Due to the great variety of materials and conditions, which are beyond our knowledge and control, we recommend carrying out sufficient prior trials.

The property rights of third parties must be respected.

This TDS replaces and supersedes all previous data sheets for the same product.

Manufactured & Imported By

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