

Technical Data Sheet

JB-EP-GROUT3K

Epoxy Tile Grout 3 Component

DESCRIPTION

JengaBond® JB-EP-GROUT3K is a hygienic, stain-resistant, 3-component epoxy resin-based tile grout with a high degree of resistance to chemical attack, abrasion, and impact. The cured grout does not transfer taints to food products, prevents the growth of fungi on the surface, and can be easily maintained in a sterile condition. Designed for grouting glazed tiles, mosaics, vitrified and fully vitrified tiles, ceramic tiles, industrial tiles, granites, marbles, and other natural stones.

STANDARDS

- Exceeds EN 13888 requirements
- Tested in accordance with AATCC 30 Part 3

AREAS OF APPLICATION

Walls and Floors ✓
 Interiors and Exteriors ✓
 Dry Areas ✓
 Showers ✓ (1)
 Swimming Pools ✓ (2)
 Heavily Trafficked Floors ✓
 Hygienic Sterile Areas ✓
 Kitchens and Cafeterias ✓

(1) Do not use showers for at least 2 weeks following completion of grouting.

(2) Do not fill pool for at least 3 weeks following completion of grouting.

FEATURES

- Hygienic and chemical resistant
- Stain and fungi resistant
- Can be cleaned off between 15 and 60 minutes after application
- Provides high strength and durable joints
- Suitable for submerged conditions
- Easy to clean from tiled surface
- Suitable for joint width of 1 – 12 mm
- Available in a wide range of colours

PHYSICAL PROPERTIES @ 27 ± 1°C

Mixed Density	Approx. 1.75 g/cc
Joint Width	1 – 12 mm
Pot Life	45 minutes
Foot Traffic	24 hours
Full Cure	7 days
Temp. Resistance — Prolonged	-30°C to 50°C
Temp. Resistance — Intermittent	Up to 70°C
Bond Strength	> 1.5 N/mm ² @ 7 days
Tensile Adhesion	4.5 kN (14 days air)
Shore D Hardness	> 70
VOC Content	48.5 g/L
Properties tested to	EN 13888:2009

MECHANICAL PROPERTIES — EN 13888:2009

Property	Min. Req.	Typical
Abrasion Resistance (EN 12808-2)	≤ 250 mm ³	238 mm ³
Flexural Strength (EN 12808-3)	≥ 30 N/mm ²	31.25 N/mm ²
Compressive Strength (EN 12808-3)	≥ 45 N/mm ²	55.0 N/mm ²
Shrinkage 24hr (EN 12808-4)	≤ 1.5 mm/m	0.5 mm/m
Water Absorption 240 min (EN 12808-5)	≤ 0.1 g	0.03 g

PACK SIZE

Component	1 kg Kit	5 kg Kit
Part A (Resin)	0.185 kg	0.925 kg
Part B (Hardener)	0.075 kg	0.375 kg
Part C (Filler)	0.740 kg	3.700 kg
Total	1.000 kg	5.000 kg

Coverage Estimates

Consumption depends on joint width and tile size. Refer to the theoretical coverage calculation below:

$$(L + B) \times T \times J \times 1.75 \div (L + J) \times (B + J) = \text{kg/m}^2$$

Mixed Density = 1.75. All dimensions in mm.

Tile Size (L×B×T mm)	2 mm	3 mm	4 mm	5 mm	8 mm	10 mm
200×300×6	5.88	4.00	3.03	2.38	1.53	1.25
300×300×8	5.56	3.70	2.78	2.22	1.42	1.15
300×600×10	5.88	4.00	2.94	2.38	1.49	1.20
450×450×10	6.67	4.34	3.33	2.63	1.67	1.35
600×600×10	9.09	5.88	4.34	3.57	2.22	1.78
800×800×10	12.50	7.69	5.88	4.76	2.94	2.38
1000×1000×10	14.29	10.00	7.69	5.88	3.70	2.94

Chemical Resistance

JengaBond® JB-EP-GROUT3K is resistant to a wide range of liquids and chemicals. Ratings: * Splash contact only | ** Contact for max. 24 hours before washing off | *** Prolonged contact

Chemical	Rating	Chemical	Rating
Acetic Acid (5%)	**	Ethanol	***
Acetic Acid (10%)	*	Ethyl Alcohol	*
Acetone	*	Ethylene Glycol	***
Acetyl Bromide	*	Fats	***
Aluminium Bromide	***	Ferric Chloride	***
Aluminium Fluoride	***	Fish Oil	***
Ammonium Bromide (5%)	**	Fluorides (except HF)	***
Baking Soda	***	Formic Acid	*
Barium Hydroxide	***	Gasoline	***
Beer	***	Ground Nut Oil	***
Benzene	*	Heptane	***
Boric Acid	***	Household Ammonia	**
n-Butanol	***	Hydrobromic Acid	**
Butyl Acetate	*	Hydrochloric Acid (dil)	**
Calcium Chloride	***	Kerosene	***
Calcium Hydroxide	***	Lactic Acid (3%)	**
Carbon Disulphide	*	Lime Juice	*
Carbon Tetrachloride	*	Linseed Oil	***
Carbonates	***	Lubricating Oils	***
Carbonic Acid	***	Methanol	**
Castor Oil	***	Milk	***
Chlorides	***	Nitrates	***
Chlorinated Paraffin	***	Nitric Acid (10%)	*
Chloroform	*	Olive Oil	***
Chromic Acid	*	Oleic Acid	***
Citric Acid	***	Palm Kernel Oil	***
Coconut Oil	***	Palm Oil	***
Cotton Seed Oil	***	Paraffin Wax	***
Diesel Oil	***	Phenol	*
Dilute Detergents	***	Phosphoric Acid (10%)	**
Pine Oil	***	Sodium Hypochlorite (15%)	***
Polypropylene Glycol	***	Soya Bean Oil	***
Potassium Hydroxide	***	Sugars	***
Proprietary Sterilising Agents	***	Sulphates	***
Silicates	***	Sulphuric Acid (45%)	*

Chemical	Rating	Chemical	Rating
Sodium Carbonate	***	Sunflower Seed Oil	***
Sodium Chloride	***	Tannic Acid	***
Sodium Hydroxide	**	Tetrahydronaphthalene	***
		1,1,1-Trichloroethane	***
		Vegetable Oils	***
		Water	***
		White Spirit	***

Application Instructions

Surface Considerations:

- Before commencing grouting, the adhesive bed must be fully set.
- The joints must be clean of all adhesive residue, dust, and debris.
- Lightly sponge the tile surface to remove dust and dirt.
- Movement Joints: provide in accordance with BS 5385 Parts 1–5 and fill with an appropriate flexible sealant. Intermediate floor joints should be reinforced with brass or stainless steel. Use stainless steel where hygiene is essential.

Mixing:

Pour the entire contents of Part A and Part B into a clean mixing vessel and mix to a uniform consistency. Slowly add Part C until a slump-free, smooth paste is obtained. Immediately pour the mixed grout onto the working area.

Notes:

- Always carry out a trial application on porous or textured tiles before full installation.
- If working in food processing, preparation, or storage areas, keep tiles and mosaics dry and do not bring the floor into service until JengaBond® JB-EP-GROUT3K is hard and fully cured. Avoid contact between food and tiling for at least 7 days after grouting.

CLEANING

Tools and containers may be cleaned using clean water while the grout is still fresh. Hardened grout can be removed from tools mechanically.

STORAGE AND SHELF LIFE

JengaBond® JB-EP-GROUT3K has a shelf life of 24 months when stored in normal dry conditions.

Note

The technical data contained in this datasheet are based on laboratory testing and site experience and are provided in good faith. BGSB Construction Products Ltd reserves the right to amend technical data without prior notice and accepts no liability for loss or damage arising from incorrect use, inadequate preparation, or failure to follow the instructions herein.

Application:

- Using a hard rubber grout float, compact JengaBond® JB-EP-GROUT3K into the joints ensuring they are completely filled. Work in small areas and remove as much excess from the tile/stone surface as possible. Strike off excess materials diagonally to the grout lines.
- Between 15–60 minutes after application, check that joints are stiff. Using a scrubber (for rustic and matt finish tiles) or a sponge/clean cloth (for smooth tiles) dampened with clean water, scrub the tile surface in a circular motion diagonally to the grout lines in both clockwise and anticlockwise directions.
- After 12–24 hours, clean the tile surface with water and soap solution to remove any epoxy stains.

PRECAUTIONS

Keep out of reach of children. Wear suitable protective clothing, gloves, and eye/face protection. After contact with skin, wash immediately with plenty of clean water. In case of contact with eyes, rinse immediately with clean water and seek medical advice. Refer to current MSDS for full safety information.