

Technical Datasheet

MULTIFILL-EPOXY THIXO

Two-component, colored epoxy tile grout and adhesive

Description

MULTIFILL-EPOXY THIXO is a high-strength and chemical-resistant, two-component, solvent-free epoxy grout for floor and wall tiles. After hardening, it shows high compressive, flexural and adhesion strength while being resistant to several acids, alkalis, corrosive agents for concrete, cleaning agents, sea water and salted water.

Suitable for joint width of 1.5-10 mm on horizontal surfaces and 1.5-6 mm on vertical surfaces.

Certified according to EN 12004 and classified as R2 adhesive. CE marked.

Classified as RG tile grout according to EN 13888. Classified A+ (the highest rating), according to the French VOC regulation, for evaluation of VOC emissions.

Fields of application

MULTIFILL-EPOXY THIXO is ideal for industrial and high-traffic areas, as well as areas requiring chemical resistance, such as slaughterhouses, breweries, laboratories, dairies, professional-use kitchens, swimming pools, etc. Also well-suited for fixing floor tiles.

Suitable also for food contact surfaces, according to W-347, EPA 330.5 and EPA 110.2.

Technical data

Base:	two-component epoxy resin
Colors:	white, grey, light grey, black, bahama beige, silver grey, other colors upon order
Mixing ratio:	100:6.5 by weight
Density (A):	1.65 kg/l at +23°C
Density (A+B):	1.55 kg/l at +23°C
Pot life:	approx. 45 min at +23°C
Cleaning:	in 45 min at +23°C
Walkability:	after 16 h at +23°C
Minimum hardening temperature:	+10°C

Partial loading:	after 48 h at +23°C
Full loading:	after 7 days at +23°C
Compressive strength:	> 45 N/mm ²
Flexural strength:	> 30 N/mm ²
Abrasion resistance:	< 250 mm ³
Drying shrinkage:	< 1.5 mm/m
Water absorption after 240 min:	< 0.1 g
Initial shear adhesion strength (after 7 days):	≥ 2.0 N/mm ²
Shear adhesion strength after water immersion (after 21 days):	≥ 2.0 N/mm ²
Shear adhesion strength after thermal shock:	≥ 2.0 N/mm ²
Service temperature:	-30°C – +80°C

All measurements were conducted in accordance with EN 13888 and EN 12004.

Cleaning of tools:

Tools should be thoroughly cleaned with water, after any work interruption.

Directions for use

1. Mixing of the components

Components A (resin) and B (hardener) are packaged in two separate containers at a predetermined mixing ratio by weight.

The contents of component B are added to component A. The two components should be mixed for approx. 5 minutes with a low-speed mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container to achieve uniform dispersion of the hardener.

2. Application process

Fixing of tiles

Spread the mixture on the substrate and “comb” it with a notched trowel to achieve a uniform application over the entire surface. Then, firmly press tiles to the desired position.

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Grouting

Using a rubber float spread the grout over the dry and clean joints applying firm pressure to fill them completely. Remove any excess with the rubber float, moving diagonally to the joints. Emulsify any grout residue on the tile face by rubbing it with a damp hard sponge and, after the grout has set a little, remove it immediately with a soft sponge. Finally, wipe over the tile surface again with a clean and damp soft sponge.

The use of lukewarm water makes cleaning easier. For even easier cleaning, you may add 10% of spirit (by weight) to the water used.

Consumption

Consumption depends on tile dimensions and joint width. Indicative cases are shown below:

Tile dimensions (in cm)	Joint width			
	2 mm	3 mm	4 mm	5 mm
2 x 2 x 0.3	930	1,400	-	-
4.2 x 4.2 x 0.6	890	1,330	1,770	2,210
10 x 10 x 0.6	370	560	740	930
10 x 10 x 0.9	560	840	1,120	1,400
15 x 15 x 0.7	290	430	580	720
15 x 15 x 1.2	500	740	990	1,240
20 x 20 x 0.7	220	330	430	540
20 x 30 x 0.7	180	270	360	450
24 x 12 x 0.8	310	470	620	780
24 x 11.5 x 1.5	600	900	1,200	1,500
24 x 11.5 x 2.0	800	1,200	1,590	1,990
24 x 11.5 x 2.5	1,000	1,500	1,990	2,490
30 x 30 x 0.8	170	250	330	410

(Consumption values in g/m²)

Packaging

MULTIFILL-EPOXY THIXO is supplied in 3 kg and 10 kg buckets at a predetermined mixing ratio by weight. The container of comp. B is packaged into the container of comp. A.

Shelf life – Storage

24 months from production date if stored in original, unopened packaging at temperatures between +5°C and +35°C. Protect from direct sunlight and humidity.

Remarks

- The working time of epoxy systems is affected by ambient temperature. The ideal application temperature ranges between +15°C and +25°C, for which the product obtains optimal workability and curing time. Room temperature below +15°C will prolong curing time, while temperatures above +30°C will reduce it. It is recommended to mildly preheat the product during winter and store the product in a cool room before application in the summer months.
- After hardening, MULTIFILL-EPOXY THIXO is completely safe for health.
- For application of MULTIFILL-EPOXY THIXO in joint width > 10 mm (horizontal surfaces) or > 6 mm (vertical surfaces), please consult the Technical Support Department.
- Please consult the directions for safe use and precautions written on the packaging before use.

Volatile Organic Compounds (VOCs)

According to Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory g, type SB, is 350 g/l (2010) for the ready-to-use product.

The ready-to-use product MULTIFILL-EPOXY THIXO contains a maximum of 350 g/l VOC.

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RESISTANCE TO CHEMICALS (according to ASTM D 543-84 or EN 12808-1):


CURING TIME
OF SPECIMENS: 7 DAYS

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WEIGHT VARIATION

S/N	Test agent	Change per % (7 days)	Remarks	Change per % (28 days)	Remarks
1	Dense hydrochloric acid 37%	- 1.02	Discoloration	- 3.56	Discoloration
2	30% sulfuric acid	+ 0.11	Discoloration	+ 0.54	Discoloration
3	5% acetic acid	+ 0.79	No consequence	+ 1.18	No consequence
4	5% lactic acid	+ 0.92	No consequence	+ 0.98	No consequence
5	60% sodium hydroxide	+ 0.06	No consequence	+ 0.18	No consequence
6	Ethanol	+ 0.65	No consequence	+ 2.54	No consequence
7	Xylene	+ 9.93	No consequence	+ 12.47	No consequence
8	Sodium hypochlorite solution 10%	- 1.00	No consequence	- 1.60	No consequence

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EN 12004:2007+A1:2012 DoP No.: MULTIFILL EPOXY THIXO/1078-02 NB: 2032 Improved reaction resin adhesive for internal and external tiling.	
Reaction to fire	Class F
Release of dangerous substances	See MSDS
Bond strength, as:	
- initial shear adhesion strength	≥ 2 N/mm ²
Durability, of	
- shear adhesion strength after thermal shock	≥ 2 N/mm ²
shear adhesion strength after water immersion	≥ 2 N/mm ²

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