

# MULTIFILL-EPOXY THIXO

## Two-component colored epoxy grout and tile adhesive

### Description

MULTIFILL-EPOXY THIXO is a two-component, solvent-free epoxy grout. It has high compressive, flexural and adhesive strength. MULTI-FILL-EPOXY THIXO is resistant to several acids, alkalis, corrosive agents for concrete, cleaning agents, sea water and salted water.

Suitable for joint width 1.5-12 mm.

It is classified as RG tile grout, according to EN 13888 and as R2T adhesive, according to EN 12004.

### Fields of application

MULTIFILL-EPOXY THIXO is applied wherever high resistance to mechanical and chemical loads is required. It is ideally combined with special tiles for industrial use. It is suitable for fixing wall and floor tiles and for pointing wall tile joints in industrial areas like breweries, dairies, laboratories, slaughterhouses and in other sectors of food or chemical industries, as well as pools, kitchens etc.

It is also suitable 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, other colors by special order
Mixing ratio:	100:6.5 by weight
Density:	1.47 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 <sup>2</sup>
Flexural strength:	30 N/mm <sup>2</sup>
Abrasion resistance:	≤ 250 mm <sup>3</sup>
Drying shrinkage:	≤ 1.5 mm/m
Water absorption after 240 min:	≤ 0.02 g
Initial shear adhesion strength:	>4.2 N/mm <sup>2</sup>
Shear adhesion strength after thermal shock:	>2.8 N/mm <sup>2</sup>
Shear adhesion strength after water immersion:	>3.6 N/mm <sup>2</sup>
Slip:	≤ 0.5 mm

All measurements were conducted according to 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 packed in two separate containers, at a pre-determined mixing ratio by weight.

The whole quantity of component B is added into 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 procedure

### Fixing of tiles

The resulting mixture should be gradually spread on the substrate and “combed” with a notched trowel in order to be uniformly applied on the whole surface. The tiles should be fixed with pressure at the desired position.

### Pointing of tile joints

The dry and clean joints are filled with the mixture using a rubber float in a diagonal direction to the joints, in order to fill them completely and remove the excessive material. The small quantity of the epoxy grout that remains on the tile surface is emulsified if rubbed with a slightly wet hard sponge and removed immediately. Then, the tile surface is cleaned again with a soft clean and slightly wet sponge. The use of lukewarm water makes cleaning easier. For even easier cleaning, you may add 10% of spirit (by weight) into the water used.

### Consumption

The consumption depends on the tile dimensions and the joint width. Indicative cases are shown below:

Tiles dimensions (in cm)	Joint width			
	2 mm	3 mm	4 mm	5 mm
2 x 2 x 0,3	1.030	1.550	-	-
4,2 x 4,2 x 0,6	990	1.470	1.970	2.680
10 x 10 x 0,6	420	620	830	1.040
10 x 10 x 0,9	620	930	1.460	1.550
15 x 15 x 0,7	320	480	640	800
15 x 15 x 1,2	550	830	1.100	1.380
20 x 20 x 0,7	240	360	480	600
20 x 30 x 0,7	200	300	400	500
24 x 12 x 0,8	340	510	680	860
24 x 11,5 x 1,5	660	1.000	1.340	1.660
24 x 11,5 x 2	900	1.330	1.780	2.210
24 x 11,5 x 2,5	1.110	1.670	2.220	2.780
30 x 30 x 0,8	180	280	370	460

(Consumption values: in g/m<sup>2</sup>)

### Packaging

MULTIFILL-EPOXY THIXO is available in packages of 2 kg, 5 kg and 10 kg at a pre-determined mixing ratio by weight. The container of component B is packed into the container of component A.

### Shelf-life - Storage

12 months from production date, if stored in original sealed packaging, in areas protected from humidity and direct sun exposure. Recommended storage temperature between +5°C and +35°C.

### Remarks

- At low temperatures, the material loses its good workability and reaction times increase. On the other hand, high temperatures reduce working time. The ideal temperature of application is between +15°C and +25°C, for which the product obtains optimal workability and curing time. Room temperature below +15°C will expand the curing time, while temperatures above +30°C will reduce it. It is recommended to mildly preheat the product in the winter, and store the product in a cool room before application in the summer.
- MULTIFILL-EPOXY THIXO is completely safe for health after hardening.
- Consult the directions for safe use and precautions written on the package.

### Volatile Organic Compounds (VOCs)

According to the 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.

# MULTIFILL-EPOXY THIXO



RESISTANCE TO CHEMICALS (according to ASTM D 543-84):

CURING TIME OF  
SPECIMENS: 7 DAYS

MULTIFILL-EPOXY THIXO

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% sulphuric acid	+ 0.11	No consequence	+ 0.54	No consequence
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



10

**ISOMAT S.A.**

17<sup>th</sup> km Thessaloniki – Ag. Athanasios  
P.O. BOX 1043, 570 03 Ag. Athanasios, Greece

**EN 12004**

Improved reaction resin adhesive  
with reduced slip

- Reaction to fire Class F
- Initial shear adhesion strength  $\geq 2 \text{ N/mm}^2$
- Shear adhesion strength after thermal shock  $\geq 2 \text{ N/mm}^2$
- Shear adhesion strength after water immersion  $\geq 2 \text{ N/mm}^2$

**ISOMAT S.A.**

BUILDING CHEMICALS AND MORTARS

**MAIN OFFICES - FACTORY:**

17th km Thessaloniki - Ag. Athanasios Road,  
P.O. BOX 1043, 570 03 Ag. Athanasios, Greece,  
Tel.: +30 2310 576 000, Fax: +30 2310 722 475

[www.isomat.eu](http://www.isomat.eu) e-mail: [info@isomat.eu](mailto:info@isomat.eu)

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the Department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical datasheet automatically cancels any previous one concerning the same product.

