

Torggler

Tiles and Natural Stone Installation

TILE EPOXY

Two-component epoxy mortar, class R2 T according to EN 12004 and class RG according to EN 13888, for the bonding and grouting up to 15 mm of ceramic, ceramic and glass mosaic, marble and natural stone elements.



- Excellent workability and easy clean-up
- High chemical and mechanical resistance
- Perfectly waterproof
- Maximum colour stability



APPLICATION AREAS

Adhesive for the laying and bonding of ceramic, mosaic, marble and natural stone elements to walls and floors where high performance is required. Highly aesthetic waterproof joint grout with excellent chemical and mechanical resistance for the vertical and horizontal grouting of tiles laid in civil, industrial and commercial areas. Ideal for areas such as bathrooms, showers, kitchens, swimming pools, pools, saunas, spa facilities, garages, shops, warehouses and rooms used for industrial processing.

TYPES OF SUBSTRATE

- Mineral substrates in general (concrete, screeds, plasters, etc.)
- Metal
- Fiberglass

TYPE OF MATERIAL TO BE LAID

- Single- and double-fired tiles

- Klinker, porcelain and glazed stoneware
- Ceramic and glass mosaic tiles
- Marble, natural stone and resin tiles

MAXIMUM ATTAINABLE THICKNESSES

Up to a thickness of approx. 5 mm as an adhesive. For gap widths up to 15 mm as a grout.

FEATURES

Tile Epoxy is a two-component epoxy resin based mortar containing special quartz particles and specific additives for creating waterproof joints with high chemical resistance. Tile Epoxy is characterized by excellent workability and its extremely easy clean up. Withstands freezing and thawing cycles.

WARNINGS

Do not use Tile Epoxy:

- If the substrate is wet
- If the water, other types of binders or solvents are not at the correct mixing ratios
- When the temperature is below +10°C or above +25°C
- A preliminary test is recommended before the grouting of untreated terracotta tiles and/or on substrates that cannot be adequately cleaned.
- For joints that may expand or contract; in this case use silicone sealants from the Torggler.
- In situations where the intended use involves prolonged contact with strong acids and/or oxidizers, as well as exposure to high amounts of UV radiation; in these cases the material could deteriorate and the colour may change.

INSTRUCTIONS FOR USE

PREPARATION

If used as an adhesive, ensure that the substrate (concrete, screed, plaster or other) has cured properly, is strong, clean, free of dust and dirt in general, oils or grease, and is not damp or wet.

MIXING THE PRODUCT

Pour the pre-dosed component B into the container of component A and mix thoroughly until a homogeneous mass is obtained.

APPLICATION

If used as an adhesive, apply the product by spreading it over the substrate with a notched trowel, then lay the ceramic or stone tile covering. If used as a joint grout, use a rubber filling knife to thoroughly fill the joints; remove any excess product. Once prepared, the mix has a pot-life of about 45 minutes. The pot-life is shorter at higher temperatures and longer at lower temperatures.

CLEANING

Clean by repeatedly passing a hard or abrasive sponge moistened with lukewarm water over the filled joints.

FINAL CLEANING

After the initial thickening of the product, final cleaning can be done using water containing 10% alcohol. Once hardened, only mechanical cleaning can be performed.

TECHNICAL SPECIFICATIONS

Name	Concentration %	Prolonged Contact at 20 °C	Occasional contact at 20 °C
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ACIDS			
Acetic	2,5%	+	+
Acetic	5%	+/-	+
Acetic	10%	-	-
Hydrochloric	37%	+/-	+
Chromic	20%	-	-
Citric	10%	-	-
Formic	2,5%	+	+
Formic	10%	-	-
Lactic	2,5%	+	+
Lactic	5%	+/-	+
Lactic	10%	-	+/-
Nitric	25%	+/-	+
Nitric	50%	-	-
Oleic		-	-
Phosphoric	50%	+/-	+
Phosphoric	75%	-	-
Sulphuric	1,5%	+	+
Sulphuric	50%	+/-	+
Sulphuric	98%	-	-
Tannic	10%	+/-	+
Tartaric	10%	+	+
Oxalic	10%	+	+
ALKALIS AND SATURATED SOLUTIONS			
Ammonia	25%	+	+
Sodium hydroxide	50%	+	+
Potash	50%	+	+
Sodium hypochlorite: Active chlorine	6,5 g/l	+/-	+
Sodium hypochlorite: Active chlorine	162 g/l	-	-
SATURATED SOLUTIONS			
Sodium hyposulphite		+	+
Sodium chloride		+	+
Calcium chloride		+	+
Iron chloride		+	+
Aluminium sulphate		+	+
Sugar		+	+
Hydrogen peroxide	1% / 10%	+	+
Sodium bisulphite		+	+
Sodium hyposulphite		+	+
OILS AND FUELS			
Gasoline		+	+
Petroleum		+	+

Diesel fuel	+	+
Olive oil	+	+
SOLVENTS		
Ethyl alcohol	+	+
Acetone	-	-
Ethylene glycol	+	+
Glycerine	+	+
Perchloroethylene	-	-
Trichloroethane	-	-
Trichloroethylene	-	-
Methylene chloride	-	-
Toluol	-	-
Benzol	-	-
Xylene	-	-

Key: + = excellent resistance, +/- = fair resistance, - = poor resistance

PARAMETER	VALUE
Mixing ratio	Comp. A : Comp. B = 94 : 6
Component A	
Consistency	pasty
Density	1,65 kg/l
Viscosity at 25 °C	Over 1.000.000 mPa*s
Solids content	100%
Component B	
Consistency	dense liquid
Density	0,95 kg/l
Viscosity	ca. 500 mPa*s
Solids content	100%

PARAMETER	REQUIREMENTS	VALUE
Measured on fresh mix		
Application temperature		da +10 °C a +25 °C
Pot life (at 23°C and 50% RH)		ca. 45 minutes
Measured on hardened product		
AS AN ADHESIVE ACCORDING TO EN 12004		
Initial shear adhesion strength (EN 12004-2 / 8.5.3.2)	> 2 N/mm ²	5,6 N/mm ²
Shear adhesion strength after water immersion (EN 12004-2 / 8.5.3.3)	> 2 N/mm ²	7,4 N/mm ²
Shear adhesion strength after thermal shock (EN 12004-2 / 8.5.3.4)	> 2 N/mm ²	2,5 N/mm ²
Open time (EN 1346)	> 20 minutes	> 20 minutes

Determination of slip (EN 1308)	< 0,5 mm	< 0,2 mm
AS A GROUT ACCORDING TO EN 13888		
Abrasion resistance (EN 12808-2)	< 250 mm ³	< 250 mm ³
Flexural strength (EN 12808-3)	30 N/mm ²	> 30 N/mm ²
Compressive strength (EN 12808-3)	> 45 N/mm ²	> 45 N/mm ²
Capillary water absorption after 240 minutes (EN 12808-5)	< 0,1 g	< 0,1 g
Shrinkage (EN 12808-4)	< 1,5 mm/m	< 1,5 mm/m
Foot traffic (at 23 °C)		ca. 24 hours
Ready for use (at 23 °C)		ca. 7 gg
Service temperature		-20 °C to +100 °C
Coverage as an adhesive		2,0 to 4,0 kg/m ²
Coverage as a joint grout		0,1 to 2,0 kg/m ²

Color	Bahama 1001, Black 9005, Bright grey 7047, Chestnut 8028, Jasmin 1013, Grey, Neutral, White
Packaging	bucket
Packaging size	3kg
Bicomponent	2 components
Pallet	100 buckets

CONSUMPTION

Coverages can vary depending on the use, the type and size of the tiles, the roughness of the substrate and the width of the gaps. Approximately 2.0-4.0 kg/m² if used as an adhesive. If used for filling joints the coverage of the product normally varies from approx. 0.1 to 2.0 kg/m².

TILE SIZE DIMENSIONS (IN MM)	JOINT WIDTH (IN MM)		
	2	5	8
20 x 20 x 4	1,2	3,2	5,1
50 x 50 x 4	0,5	1,3	2,0
100 x 100 x 6	0,4	1,0	1,5
120 x 240 x 12	0,5	1,2	1,9
200 x 200 x 10	0,3	0,8	1,3
300 x 300 x 10	0,2	0,5	0,8
400 x 400 x 10	0,2	0,4	0,7
150 x 900 x 10	0,3	0,6	1,0
600 x 1200 x 10	0,1	0,2	0,3

The values in the table are expressed in kg/m².

FORMULA FOR CALCULATING THE COVERAGE OF TILE EPOXY

$[(A+B)/(A \times B)] \times C \times D \times 1,6 = \text{coverage} \dots\dots \text{kg/m}^2$

Key: A = tile length, B = tile width, C = tile thickness, D = joint width



STORAGE

24 months if kept in a cool, dry place in its original packaging at a temperature between +10 and +25°C.

CERTIFICATIONS

The declarations of performance (DoP) are available upon request.

The information contained in this document is reported on the basis of our experience and knowledge; therefore, any recommendations and suggestions made are without any guarantee and must be verified before using the product by those who intend to use it, who assume all responsibility that may result from its use since the conditions of use are not under our direct control. In case of doubt, it is always advisable to make preliminary tests and/or ask for the intervention of our technicians. Torggler reserves the right to modify, replace and/or delete the items, as well as to change the product data in this document without prior notice; in this case the indications given here may no longer be valid. Always refer to the latest version of the data sheet, available at www.torggler.com. Version 29.06.2022.