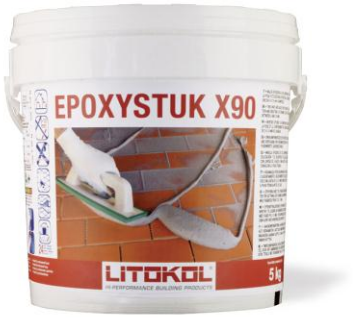

EPOXYSTUK X90

TWO- PART ACID-RESISTANT EPOXY MORTAR FOR INSTALLATION AND GROUTING OF CERAMIC TILES WITH JOINT WIDTHS BETWEEN 1 AND 15 mm

DESCRIPTION

Two-part anti-acid epoxy mortar. Part A consists of an epoxy resin mixture, siliceous aggregates and additives.
Part B consists of a mixture of organic catalysts.

CLASSIFICATION EN 13888

EPOXYSTUK X90 Class RG Reactive grout

CLASSIFICATION EN 12004

EPOXYSTUK X90 Class R2T
Enhanced reactive adhesive with zero vertical slip

PACKAGING

5 kg plastic bucket – Pallet 80x120 500 kg
10 kg plastic bucket – Pallet 80x120 440 kg

FIELDS OF APPLICATION

Suitable for acid-resistant installation and grouting of floor and wall tiles and mosaic in interiors and exteriors with grout joints between 1 and 15 mm wide. Suitable for applications where the surfaces are exposed to aggressive chemical substances (see chemical resistance table) such as dairies, abattoirs, pubs, food factories in general.
It is also recommended for grouting swimming pools and tanks, containing thermal or brackish water.

PRELIMINARY CHECKS AND JOINT PREPARATION

Check that the tiles do not present problems of cleaning or surface absorption. Some kinds of tiles (e.g. polished porcelain tile) and natural stone have rough, microporous surfaces, making them susceptible to staining and very difficult to clean. In this case preliminary application checks should be performed. Avoid using grouts with contrasting or excessively dark colours.
Check that the adhesive or mortar used to fix the tiles has completely hardened and dried.
The joints must be clean, free of powder and empty down to all the tile thickness.
Any adhesive or mortar that has squeezed up inside the joints must be removed.

MIXING RATIOS

PART A: 100 parts by weight PART B: 8 parts by weight
The two parts are pre-batched in their respective containers

MIX PREPARATION

Pour part B (catalyst) contained in the plastic bag onto part A (paste). Be sure to pour on the entire contents of the catalyst. Mix using an electric drill equipped with mixing paddle until a uniform, lump-free mix is obtained. Scrape the sides and the bottom of the container, using a steel spatula, to make sure that all the paste is catalyzed.
Hand mixing is not recommended.

The two parts are pre-batched in their packaging, avoiding , this way, all risk of mixing errors.

GROUTING

Introduce the paste into the joints using a special green rubber float (art. 946GR).
For large surfaces, an electric single-brush floor maintenance machine equipped with an abrasion-resistant rubber scraper can be used. Remove excess product using the rubber float.
The product's pot life and hardening time is strongly dependent on the ambient temperature.
The ideal temperature for application is between +18 and +23°C.
In these conditions the product is an easily workable smooth mortar, with a pot life of about 1 hour.
It is ready for foot traffic after 24 hours.
At a temperature of +15°C it takes three days before the surface is ready for foot traffic.
The floor is ready to use and resistant to chemicals after 5 days at a temperature of +23°C and after 10 days at a temperature of +15°C.
At temperatures between +8 and +12°C, the product is very dense and difficult to apply.
The hardening time is also lengthened considerably. Do not add water or solvents to improve workability.
In hot weather it is advisable to apply the product to the floor as quickly as possible so as not to shorten further the pot life due to the reaction heat in the container. This applies in particular to the 10 kg container.

CLEANING AND FINISHING

The grout work must be cleaned and finished while the product is still wet and in any case in the shortest possible time.
Take care not to remove product from the joints or leave stains on the tile surface.
Cleaning and finishing can be performed either manually or using an electric single-brush machine equipped with a felt disc

MANUAL METHOD

First sprinkle clean water over the grouted surface. If necessary, perform initial cleaning using a float equipped with a moistened white felt (art. 109/G).
Make circular movements in both clockwise and anticlockwise directions in order to seal perfectly the sides of the tiles and to remove excess grout from the surface of the tiles.
Now perform a second pass with a sweepex sponge (art. 128/G) in order to obtain a smooth, closed surface and to remove completely the product from the surface of the tiles, without removing it from the joints, as well as to dry off the excess of water.
When the felt and sponge are impregnated with resin and can no longer be used, they must be replaced.

METHOD WITH SINGLE-BRUSH MACHINE

After removing excess grout from the surface, sprinkle plenty of clean water over the grouted surface. Now commence cleaning using the single-brush machine equipped with a felt disc. Replace the felt disc when it is impregnated with product.

USE AS ADHESIVE

Apply to the substrate using a trowel with suitable notch size, then position the tiles and press firmly into place.

CAUTIONS

- If possible, apply the product at temperatures between +18°C and +23°C.
- The white coloured product tends to take on an ivory shade over time.
- Remove excess product from the tile surface rapidly because once hardened it will have to be removed mechanically, seriously jeopardising the finished result.
- Do not use for grouting Tuscan terracotta.
- Some kinds of tiles (e.g. polished porcelain tile) and natural stone have rough, microporous surfaces, making them susceptible to staining and very difficult to clean. In this case preliminary test application should be performed. Avoid using grouts with contrasting or excessively dark colours.
- Unglazed clinker must be grouted solely with the Bahama Beige colour product.
- The product must not be used for grouting tanks containing aggressive substances with which only occasional contact is permitted (see chemical resistance table).
- Do not mix the product with water or solvents.
- Thin ceramic stoneware obtained through compaction and with structured faux wood surfaces can present problems for the removal of halos. In these cases, it is recommended to perform a preventive sample application or consult the Litokol technical office.
- Do not use for applications not stated on this technical sheet.

IDENTIFICATION DATA

Appearance	Part A: thick paste Part B: dense liquid
Colours available	C.00 Bianco
	C.30 Grigio Perla
	C.15 Grigio Ferro
	C.60 Bahama Beige
Classification to EN 13888	Class RG -Reactive grout
Classification to EN 12004	Class R2T Enhanced reactive adhesive with zero vertical slip
Customs code	35069190
Shelf life	24 months in original packaging in dry place

PERFORMANCE

Shear adhesion strength EN 12003	**Initial**	≥ 2 N/mm²
	After immersion in water	≥ 2 N/mm²
	After thermal shock	≥ 2 N/mm²
Abrasion resistance (EN 12808-2)		≤ 250 mm³
Mechanical flexural strength after 28 days in standard conditions (EN 12808-3)		≥ 30 N/mm²
Mechanical compressive strength after 28 days in standard conditions (EN 12808-3)		≥ 45 N/mm²
Shrinkage (EN 12808-4)		≤ 1,5 mm/m
Water absorption after 4 hours (EN 12808-5)		≤ 0,1 g
Temperature of use		From – 20°C to +100°C
Chemical resistance		See table

APPLICATION DATA

Time before grouting	Floor tile installation with normal-setting adhesive: 24 hours Floor tile installation with fast-setting adhesive: 4 hours Floor tile installation with mortar: 7-10 days Wall tile installation with normal-setting adhesive: 6-8 hours Wall tile installation with fast-setting adhesive: 4 hours Wall tile installation with mortar: 2-3 days
Mixing ratios	PART A: 100 parts by weight PART B: 8 parts by weight The two parts are pre-batched in their respective containers
Mix consistency	Creamy
Specific gravity of mix	1,55 kg/L
Pot life	About 1 hour at T=+23°C
Permitted application temperatures	From +12°C to +30°C
Recommended application temperatures	From +18°C to +23°C
Walk on time	24 hours at T=+23°C
Ready for use	5 days at T=+23°C
Joint width	From 1 to 15 mm

Comsuption

Tiles size (cm)		Joint widths (mm)	Comsuption (kg/m²)
Klinker	12X24X1,2 25X25X1,2	5-8-10	1,16-1,86-2,33 0,74-1,19-1,49
10 x 10 x 0,6 15 x 15 x 0,6		3-4-6	0,56-0,74-1,12 0,37-0,50-0,74
15 x 20 x 0,6 25 x 25 x 1,2		3-4-6-8	0,33-0,43-0,65-0,87 0,45-0,60-0,89-1,19
25 x 33 x 0,8 33 x 33 x 1		4-8-10	0,35-0,70-0,87 0,38-0,75-0,94
30 x 45 x 1 45 x 45 x 1,2		4-10	0,34-0,86 0,33-0,83
50 x 50 x 1,2 60 x 60 x 1,2		6-10	0,45-0,74 0,37-0,62

CHEMICAL RESISTANCE TABLE

(the table is a summary of the chemical resistance proof made according to regulation UNI EN 12808)
CHEMICAL RESISTANCE ON INDUSTRIAL FLOORS

Group	Name	Conc. %	CONTINUOUS USE				INTERMITTENT USE
			24 hours	7 days	14 days	28 days	
Acids	Acetic Acid	2,5	🟢	🟢	🟢	🟢	🟢
		5	🟢	🟢	🟢	🟡	🟢
	Hydrochloric Acid	37	🟢	🟢	🟢	🟡	🟢
	Citric Acid	10	🟢	🟢	🟢	🟢	🟢
	Lactic Acid	2,5	🟢	🟢	🟢	🟢	🟢
		5	🟢	🟢	🟢	🟢	🟢
		10	🟢	🟢	🟢	🟢	🟢
	Nitric Acid	25	🟢	🟢	🟢	🟢	🟢
		50	🟢	🔴	🔴	🔴	🟢
	Oleic Acid	-	🟢	🔴	🔴	🔴	🟢
	Sulphuric Acid	1,5	🟢	🟢	🟢	🟢	🟢
		50	🟢	🟢	🟢	🟢	🟢
		96	🔴	🔴	🔴	🔴	🔴
	Tannic Acid	10	🟢	🟢	🟢	🟢	🟢
	Tartaric Acid	10	🟢	🟢	🟢	🟢	🟢
	Oxalic Acid	10	🟢	🟢	🟢	🟢	🟢
Alkalis	Ammonia in solution	25	🟢	🟢	🟢	🟢	🟢
	Caustic Soda	50	🟢	🟢	🟢	🟢	🟢
	Sodium Hypochlorite Conc. Cl active	>10	🟢	🟢	🟢	🟡	🟢
	Caustic Potash	50	🟢	🟢	🟢	🟢	🟢
	Sodium Bisulphite	10	🟢	🟢	🟢	🟢	🟢
Concentrated solutions 20°C	Iposulphite Sodium		🟢	🟢	🟢	🟢	🟢
	Calcium Chloride		🟢	🟢	🟢	🟢	🟢
	Sodium Chloride		🟢	🟢	🟢	🟢	🟢
	Ferric Chloride		🟢	🟢	🟢	🟢	🟢
	Sugar		🟢	🟢	🟢	🟢	🟢
Oils and fuels	Petrol, Fuels		🟢	🟢	🟢	🟡	🟢
	Turpentine		🟢	🟢	🟢	🟢	🟢
	Gas Oil		🟢	🟢	🟢	🟢	🟢
	Olive Oil		🟢	🟢	🟢	🟢	🟢
	Lube Oil		🟢	🟢	🟢	🟢	🟢
Solvents	Acetone		🟢	🔴	🔴	🔴	🟢
	Ethylene Glycol		🟢	🟢	🟢	🟢	🟢
	Glycerine		🟢	🟢	🟢	🟢	🟢
	Ethyl Alcohol		🟢	🟢	🟡	🔴	🟢
	Solvent Petrol		🟢	🟢	🟢	🟢	🟢
	Peroxide Water	10	🟢	🟢	🟢	🟢	🟢
		25	🟢	🟢	🟢	🟢	🟢

KEY

🟢 EXCELLENT RESISTANCE 🟡 GOOD RESISTANCE 🔴 POOR RESISTANCE

SAFETY INFORMATION
Consult the Material Safety Data Sheet, available on request.
PRODUCT FOR PROFESSIONAL USE.

Although the information in this technical sheet is source of our best experience, it is merely indicative.
Each specific case must be subjected to practical preliminary tests by the user who undertakes the responsibility for the final work result..

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LITOKOL S.p.A.
Via G. Falcone, 13/1 42048 Rubiera (RE) Italy
Tel. +39 0522 622811 Fax +39 0522 620150
www.litokol.it email: info@litokol.it