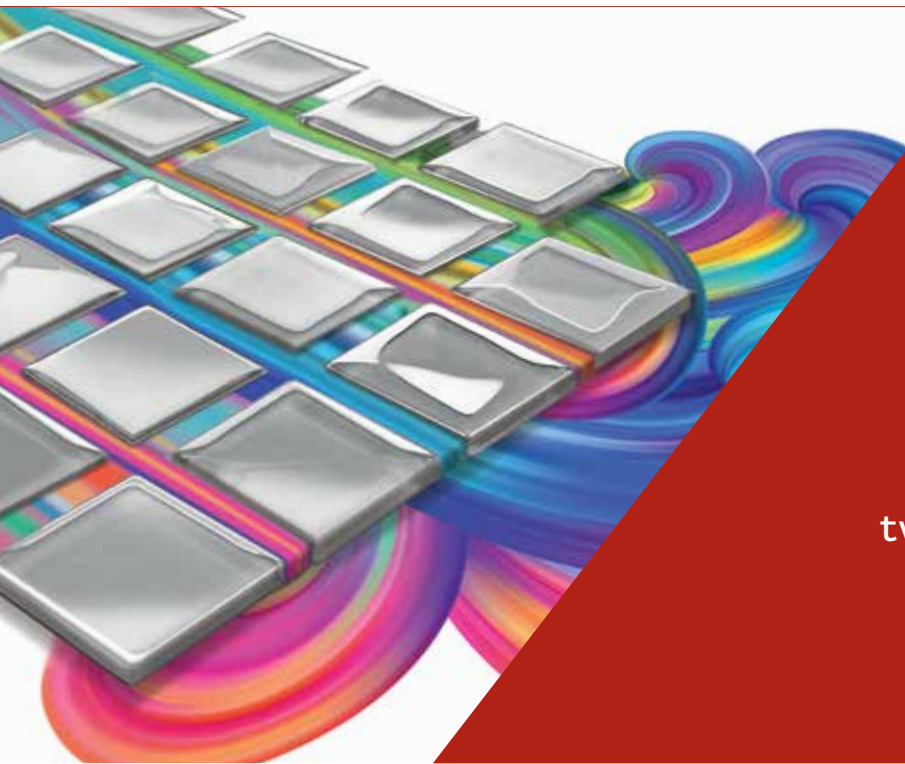




TILE & STONE FIXING EXPERT



T34 STARLIKE

High performance, easy to use,
two component epoxy tile grout



UV Resistance



Waterproof



Acid & Stain
Resistant



Flexible



Low VOC



Zero Shrinkage



Available in 1 kg & 5 kg



T34 STARLIKE

DESCRIPTION

Roff STARLIKE® is high performance, easy to use, 2 component epoxy grout. Part A consists of an epoxy resin mixture, inert ceramic quartz and mud additives. Part B

consists of a mixture of organic catalysts with minimum environmental side effects and lower exposure risks for users.

STANDARD COMPLIANCE/ SPECIFICATION

EN 13888 CLASSIFICATION

Roff STARLIKE® : Class RG Reactive grout

EN 12004 CLASSIFICATION

Roff STARLIKE® is an Class R2T enhanced reactive adhesive with zero vertical slip for indoor and outdoor ceramic tiling

for walls and floors. The product conforms to EN 12004 regulations, indicated on the Performance Declaration CPT-IT308, as per the European Construction Products Regulation No. 305/1022/EU, and is tested by a European entity notified according to system 3 certification

AREAS 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, such as :

- Floor and wall tiles in general for residential, public and industrial areas
- Underfloor heating
- Floor and wall tiles in bathrooms and showers
- Kitchen countertops
- Terraces and balconies

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, spas and hammam baths.

FEATURES & BENEFITS

- Extremely easy application and cleaning, even compared to normal cementitious sealants. Prevents colour pigment leakage onto ceramic surfaces.
- Stable and uniform colouring for all types of tiles with exclusive colour effects.
- High mechanical strength.
- Waterproof
- Total absence of cracking or crazing during hardening.
- Excellent chemical resistance.
- UV resistance

- Unlike other epoxy mortars on the market, the Roff STARLIKE®'s catalyst (Part B) is labelled Xi – Irritant. It is not corrosive nor dangerous for the environment.
- Roff STARLIKE® is not classified as dangerous goods and is exempt from transportation restrictions (ADR-AND-IMDG-IATA classes)
- Made with low volatile organic chemical emissions, conforms to Class A+ in the French Regulations.

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APPLICATION



Preliminary checks and joint preparation

- 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 at least 2/3 of 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

- Cut off a corner from the bag, containing the catalyst (part B), situated in the small bucket, and pour it onto part A (paste).
- It is recommended to empty completely the bag with the catalyst, rolling it up towards the cut side.
- 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.
- The paste is workable for approximately 1 hour at a temperature about +23°C.

Grouting

- Introduce the paste into the joints using a special green rubber float (art. 104/G).
- 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 +10°C to +35°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.
- 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.





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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.
- 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.

WARNINGS

- If possible, apply the product at temperatures between +10°C to +35°C.
- Do not use at low temperatures or in environment with high humidity, in order to avoid the superficial carbonation that may modify the uniformity of the colour.
- Remove excess product from the tile surface rapidly because once hardened it will have to be removed mechanically, seriously jeopardising the finished result.
- Mix the two components (A+B) correctly.
- While cleaning change frequently the water.
- Change the felt and the sponge when they are impregnated with resin.
- Don't walk on the just grouted surface so as not to stain the floor with epoxy resin.
- Do not cover the grouted surface with length of cloth or other materials to avoid the condensation that may cause the superficial carbonation of the product with the resulting non-homogeneity of the colour.
- Do not use for grouting Tuscan terracotta or other materials and porous manufactured products like cementitious riddles.

- 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.
- Stains or residues of transparent product can be removed after 24 hours or at any rate after grout hardening (the time of hardening depends greatly on the environmental temperature), using Roff Cera Clean tile cleaner.
- For a correct use see the technical data sheet.

Use as adhesive

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

- In case of grouting natural stones, it is necessary to execute a preliminary test, in order to verify the absorption of resin by the stone slabs.
- In case of the resin absorption, the dark stains may form on the sides and on the surface of the slabs and they can't be removed.
- This problem is usual for marbles of light colours.
- 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.
- For the maintenance and cleaning of grouted surfaces with Roff STARLIKE®, we do not recommend the use of bleach. If bleach is not properly diluted and well rinsed, it can lead to a yellowing of the grouting and this could be visible especially on light colors.
- Do not use for applications not stated on this technical sheet.



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TECHNICAL INFORMATION

Testing Properties	Test Results
Appearance	Part A - thick coloured paste Part B - thick liquid
Time before grouting	Floor tile installation With normal-setting adhesive : 24 hours With fast-setting adhesive : 4 hours With mortar : 7-10 days Wall tile installation With normal-setting adhesive : 6-8 hours with fast-setting adhesive : 4 hours 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
Permitted application temperatures	From +10°C to +35°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
Shear adhesion strength (EN 12003)	Initial $\geq 2 \text{ N/mm}^2$ After immersion in water $\geq 2 \text{ N/mm}^2$ After thermal shock $\geq 2 \text{ N/mm}^2$

TECHNICAL INFORMATION

Testing Properties	Test Results
Abrasion resistance (EN 12808-2)	$\leq 250 \text{ mm}^3$
Mechanical flexural strength after 28 days in standard conditions (EN 12808-3)	$\geq 30 \text{ N/mm}^2$
Mechanical compressive strength after 28 days in standard conditions (EN 12808-3)	$\geq 45 \text{ N/mm}^2$
Shrinkage (EN 12808-4)	$\leq 1.5 \text{ mm/m}$
Water absorption after 4 hours (EN 12808-5)	$\leq 0.1 \text{ g}$
Temperature of use	From -20°C to +100°C
Shelf life	24 months in original packaging in dry place
PACKAGING	1kg (925 g of Part A & 75 g of Part B) & 5kg (4.620 kg of Part A & 380 g of Part B)



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COVERAGE

CONSUMPTION TABLE DEPENDENT ON THE SIZE OF THE TILES AND WIDTH OF THE JOINTS (Kg/m²)

Tile Grout Coverage			Theoretical Coverage in Kg/ m ²							
Length	Width	Thickness	2	3	4	5	6	8	10	12
300	200	6	0.16	0.23	0.31	0.39	0.47	0.62	0.78	0.93
300	300	6	0.12	0.19	0.25	0.31	0.37	0.5	0.62	0.744
450	300	6	0.1	0.16	0.21	0.26	0.31	0.41	0.52	0.62
600	300	6	0.09	0.14	0.19	0.23	0.28	0.37	0.47	0.558
600	600	8	0.08	0.12	0.17	0.21	0.25	0.33	0.41	0.496
800	800	8	0.06	0.09	0.12	0.16	0.19	0.25	0.31	0.372
1000	1000	10	0.06	0.09	0.12	0.16	0.19	0.25	0.31	0.372
1200	600	10	0.08	0.12	0.16	0.19	0.23	0.31	0.39	0.465
1200	800	10	0.06	0.1	0.13	0.16	0.19	0.26	0.32	0.3875
1200	1200	12	0.06	0.09	0.12	0.16	0.19	0.25	0.31	0.372
1600	800	12	0.07	0.1	0.14	0.17	0.21	0.28	0.35	0.4185
1800	1200	12	0.05	0.08	0.1	0.13	0.16	0.21	0.26	0.31
25	25	6	1.49	2.23	2.98	3.72	4.46	5.95	7.44	8.928
25	50	6	1.12	1.67	2.23	2.79	3.35	4.46	5.58	6.696
50	50	6	0.74	1.12	1.49	1.86	2.23	2.98	3.72	4.464
100	100	6	0.37	0.56	0.74	0.93	1.12	1.49	1.86	2.232
100	100	10	0.62	0.93	1.24	1.55	1.86	2.48	3.1	3.72

*The coverage mentioned in table is indicative only and can vary as per the tile size, thickness, joint width & wastage during application. 5% wastage considered in the above-mentioned table.

CHEMICAL RESISTANCE TABLE

(the table is a summary of the chemical resistance proof made according to regulation UNI EN 12808-1)

RESISTANCE TO CHEMICALS OF CERAMIC TILES TREATED WITH STARLIKE® FIELD OF APPLICATION 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	•	•	•	•	•	

• Excellent Resistance • Good Resistance • Poor Resistance

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Group	Name	Conc. %	CONTINUOUS USE				INTERMITTENT USE
			24 hours	7 days	14 days	28 days	
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	• •	• •	• •	• •	• •

• Excellent Resistance • Good Resistance • Poor Resistance

FORMULA FOR THE COVERAGE CALCULATION

$$C = 1.55 \times H \times T \times [(L + W) / (L \times W)]$$

C - Tile grout coverage (kg/m²)

H - Thickness of tile (mm)

T - Width of joint (mm)

L - Length of tile (mm)

W - Width of tile (mm)

PACKAGING

1 kg & 5 kg

SHELF LIFE

24 months for sealed pack when stored under cover, out of direct sunlight, dampproof condition and protect from extremes of temperature (store between +15 °C to +35 °C temperature).

SAFETY PRECAUTIONS

Keep out of reach of children. Wear suitable protective clothing, gloves and eyes/face protection. After contact with skin, wash immediately with plenty of clean water. In case of contact with eyes rinse immediately with plenty of clean water and seek medical advice. Limited to professional use only.

For more details, please refer the relevant Material Safety Data Sheet, available on request.