

## TECHNICAL DATA – Epoxy Grout

# Epoxy Grout

**Two component, water washable, easy to use grout**

### **DESCRIPTION:**

Two-part anti-acid epoxy mortar. Part A consists of a mixture of epoxy resin, selected fine-grain inert aggregates, pigments and specific organic additives. Part B consists of an innovative organic catalyst. Once mixed together, the two parts form a creamy mixture with excellent smoothness, which is also suitable for vertical no-slip application. Once hardened, the product is high-performing in terms of mechanical and chemical resistance. The product has been expressly formulated to meet the requirements of Part 5 of the IMO FTP Code 2010 as “finishing material for bulkheads and ceilings” for the naval sector.

### **FEATURES & BENEFITS:**

- Reactive grout formulated with specific raw materials with limited flame-propagation properties, which gives the product exceptional ease of application.
- Depending on the grain texture of the aggregates, it is possible to obtain a particularly smooth and compact grout with a high aesthetic impact and minimum staining.
- Suitable for indoor and outdoor floor and wall applications, even in harsh operating conditions.
- RLA Epoxy Grout has high resistance to mechanical stress and chemical substances with no water absorption.
- RLA Epoxy Grout has ultra-low emission of volatile organic compounds.
- RLA Epoxy Grout is not subject to restrictions for road, sea, air and rail transport.

### **AREAS OF APPLICATION:**

Suitable for the acid-resistant grouting of floors and walls, for application on ceramic tiles and mosaics with 1 to 15 mm wide joints. Suitable for applications where the surfaces are exposed to aggressive chemical substances (see Chemical Resistance Table) such as dairies, slaughterhouses, breweries, and food factories in general. Suitable for applications subject to heavy-duty operating conditions, such as swimming pools, hammams, whirlpools, heavy-traffic floors, and tiles exposed to extreme temperature fluctuations. Typical applications include:

- Grouting of ceramic tiles and mosaics on wooden kitchen tops;
- Grouting of ceramic tiles and mosaics in swimming pools, including surfaces waterproofed with
- Grouting of ceramic tiles, mosaics and natural stones installed on metal surfaces for the construction of prefabricated bathrooms;
- Grouting of ceramic tiles, thin reinforced slabs, mosaics, natural stones or resin agglomerates installed on heated floors;
- Grouting of glass or ceramic mosaic joints installed on structures and templates of extruded polystyrene panels used in Turkish baths, hammams and wellness centres;
- Also recommended for grouting swimming pools or pools containing spring water.

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### **PRELIMINARY CHECKS AND JOINT PREPARATION**

Make sure that the ceramic tiles can be cleaned easily and their surface is not absorbent. In fact, some types of tiles (e.g., polished porcelain tiles) or natural stones feature micro-porosities and surface roughness that can stain their surface and make cleaning very difficult. In these cases, it is advisable to perform a spot test and, in any case, avoid using grouts with contrasting or very dark colours.

Check that the adhesive or mortar used for bonding the tiles is completely hardened and dry. The joints must be clean, free from dust and any debris. Any traces of adhesive or mortar flowing between the joints and the plastic spacers must be removed.

### **MIXING**

#### **MIX RATIO**

Part A: 93.7 parts by weight

Part B: 6.3 parts by weight

The two parts are pre-batched in their respective packaging.

#### **MIX PREPARATION**

Pour part B (catalyst) onto part A (paste). We recommend pouring all the catalyst contained in the bag. Mix preferably with the help of a drill mixer to obtain a smooth, lump-free mixture. Hand mixing is not recommended. The two parts are pre-batched in their packaging, thus avoiding the risk of mixing errors.

### **TILED SURFACE GROUTING**

Apply the paste in the joints using a Suitable good quality Epoxy Grout Squeegee, removing any excess product. The product's working life and hardening time is strongly dependent on the ambient temperature. The optimum application temperature is between +18°C and +23°C. Under these conditions, the product is soft, easily workable and with a working time of approximately 1 hour. It is ready for foot traffic after 24 hours. The surface can be commissioned after 7 days at a temperature of +23°C. At temperatures between +8°C and +12°C, the product is very thick and difficult to apply. The hardening time is also lengthened considerably. Do not add water or solvents to improve workability. In the presence of high temperatures, we recommend applying the product as quickly as possible on the floor, in order not to shorten the workability time further due to the reaction heat present in the package.

### **CLEANING AND FINISHING**

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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. Perform an initial cleaning with a trowel equipped with a damp white felt to remove excess product, making circular movements clockwise and counter-clockwise, in order to perfectly seal the sides of the tiles and to remove excess grout from the tile surface. Complete a second cleaning cycle with a Suitable flat Epoxy Sponge for smooth and gap-free grout, completely removing the product from the tiles, making sure that you do not remove any grout from the joints, and drying any excess water. To facilitate the cleaning operation, we recommend using two bucketful's of water, one for rinsing felt and sponge and to collect any dirty water, and the other with clean water for the final surface cleaning. Replace felt and sponge when they become soaked with resin and can no longer be cleaned. Any product residue left behind on the surface of ceramics can be removed using a plastic scourer with clean warm water or a suitable Epoxy grout cleaner after about 24 hours and, in any case, once the grout has hardened.

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### **PRECAUTIONS**

- If possible, apply the product at temperatures between +18°C and +23°C.
- Do not apply the product under high humidity conditions, in order to avoid superficial carbonation phenomena.
- Avoid contact of dust or polluting materials from concomitant processes with grout that has not yet hardened.
- Promptly remove any excess product from the tile surface given that, once hardened, the product can only be removed mechanically, with serious risks of compromising the final outcome.
- The product cannot be used for grouting Tuscan terracotta.
- Some types of tiles (e.g., polished porcelain tiles) or natural stones feature micro-porosities and surface roughness that can stain their surface and make cleaning very difficult. In these cases, it is advisable to perform a spot test and, in any case, avoid using grouts with contrasting or very dark colours.
- The product cannot be used for grouting tanks containing aggressive substances, which are allowed only for intermittent contact (see Chemical Resistance Table).
- Do not mix the product with water or solvents.
- Do not use the product for applications not stated in this technical sheet

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### **SAFETY INFORMATION**

Consult the product safety data sheets, available on request. **PRODUCT FOR PROFESSIONAL USE**

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## TECHNICAL DATA – Epoxy Grout

IDENTIFICATION DATA	
Appearance	Part A: thick paste Part B: liquid
Colours	
Classification as per EN 13888	RG- reactive grout
IMO Classification - Res. MSC.307(88)-(2010 FTP Code)	Certificate no. MED311618CS/001 issued by <i>RINA Services S.p.A.</i>
Customs code	35069190
Shelf life	24 month in original packaging Keep away from frost
APPLICATION DATA	
Ready for grouting	Floor installation with standard setting adhesive: 24 hours Floor installation with quick setting adhesive: 4 hours Cladding installation with standard setting adhesive: 6-8 hours Cladding installation with quick setting adhesive: 4 hours
Mixing ratios	Part A: 93.7 parts by weight Part B: 6.3 parts by weight The two parts are pre-batched in their respective packaging.
Mix consistency	Thixotropic paste
Specific gravity of mix	1.6 kg/L
Pot life	About 1 hour at T=+23°C
Recommended application temperature	From 5°C to 30°C
Walk on time	24 hours at T=+23°C
Ready for use	7 days at T=+23°C
Joint width	From 1 to 15 mm

PERFORMANCE		
Abrasion resistance	≤ 250 mm <sup>3</sup>	EN 12808-2
Flexural strength after 28 days at standard conditions	≥ 30 N/mm <sup>2</sup>	EN 12808-3
Compression strength after 28 days at standard conditions	≥ 45 N/mm <sup>2</sup>	EN 12808-3
Shrinkage	≤ 1.5 mm	EN 12808-4
Water absorption after 4 hours	≤ 0.1 g	EN 12808-5
Temperature of use	From - 20°C to +100°C	
Chemical resistance	See Table	

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	Format (cm)	Joint width (mm)	Consumption (kg/m <sup>2</sup> )	
Consumption	Mosaics	2	1.0X1.0X0.4	1.4
			1.5X1.5X0.4	1.2
			1.5X1.5X0.6	1.8
			1.5X1.5X0.8	2.4
			1.5X1.5X1.0	2.7
			2.3X2.3X0.4	0.85
			2.3X2.3X0.6	1.3
			2.3X2.3X0.8	1.7
	Clinker	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		

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### CHEMICAL RESISTANCE TABLE

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

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	●	●	●	●	●
		2.5	●	●	●	●	●
	Lactic Acid	5	●	●	●	●	●
		10	●	●	●	●	●
	Nitric Acid	25	●	●	●	●*	●
		50	●	●	●	●	●
	Pure Oleic Acid	-	●	●	●	●	●
		1.5	●	●	●	●	●
	Sulphuric Acid	50	●	●	●	●	●
	96	●	●	●	●	●	
	Tartaric Acid	10	●	●	●	●	●
Alkalis	Ammonia in solution	25	●	●	●	●	●
	Caustic Soda	50	●	●	●	●	●
	Sodium Hypochlorite in solution Conc. Active Cl	10	●	●	●	●	●
	Potassium hydroxide	50	●	●	●	●	●
Saturated solutions at 20°C	Calcium Chloride		●	●	●	●	●
	Sodium Chloride		●	●	●	●	●
	Sugar		●	●	●	●	●
Oils and fuels	Lead-free gasoline		●	●	●	●	●
	Diesel		●	●	●	●*	●
	Extra Virgin Olive Oil		●	●	●	●	●
	Lube Oil		●	●	●	●	●
Enzymatic cleaners	Cleaner 1 at 4%		●	●	●	●*	●
	Cleaner 2 at 5%		●	●	●	●	●
Solvents	Acetone		●	●	●	●	●
	Ethylene Glycol		●	●	●	●	●
	Ethyl alcohol		●*	●*	●*	●*	*
	Hydrogen Water	10 vol.	●	●	●	●	●
	25 vol.	●	●	●	●	●	

KEY ● RESISTANT ●\* RESISTANT WITH POSSIBLE COLOUR VARIATION ● NOT RESISTANT

Although the information provided in this technical data sheet is accurate to the best of our knowledge and experience, it is intended purely as a guideline. The user must carry out preliminary practical tests before each use and is solely responsible for the final result.

## TECHNICAL DATA – Epoxy Grout

### AVAILABILITY:

**RLA Epoxy Grout** is available Australia wide through the RLA Group distributor network. Please contact RLA Group 1800 242 931 to find out where your nearest stockist will be.

### TECHNICAL SUPPORT:

RLA Polymers manufactures a comprehensive range of high quality, high performance construction products. In addition, RLA Polymers offers technical support and on-site advice to specifiers, end users and contractors. Please contact your RLA Polymers sales representative or RLA Head Office for this service

<b>Product:</b>	<b>Epoxy Grout</b>	
<b>Issue Date:</b>	<b>AUG 19</b>	
<b>Issue No:</b>	<b>D01</b>	
<b>Item Code:</b>	<b>Arctic</b>	<b>620400</b>
	<b>Mid Grey</b>	<b>620401</b>
	<b>Slate</b>	<b>620402</b>
	<b>Charcoal</b>	<b>620403</b>

### DISCLAIMER

The information and any recommendations relating to the application and end-use of all RLA products are provided in good faith based on RLA's knowledge and experience of the products. In applications, the differences in materials, and variances of substrates and actual site conditions can vary such that no warranty in respect of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be taken as inferred either from this information, or from any written recommendations, or from any other advice offered by RLA. The proprietary rights of third parties must be observed. All orders are accepted subject to our sale terms and conditions. All users should always refer to the most recent and up to date issue of the Technical Data Sheet for the product concerned, which is available on request. It is recommended that products should always be properly stored, handled and applied under tested and recommended conditions.

PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.