PARO SYSTEM

TECHNICKÝ LIST /

GE

RG epoxy jointing material



Two-component epoxy jointing material intended for all types of wall and floor tiles in chemically stressed internal and external environments.

DECLARATION: Jointing material from hardenable resins, type RG according to EN 13888.

APPLICATION:

Water resistant jointing of ceramic and glass tiles, including natural stone, with the joint width of 3-15 mm.

This material is suitable for tiles in internal and external environments, in particular, swimming pools (including salt and thermal water), terraces, operational halls in chemical and food industries, hospitals, laboratories, car repair shops, toilets, showers, and the like – hygienically safe.

This product is also intended for the jointing of potable water tanks (waterworks, water reservoirs, water treatment plants, tanks). – hygiene certificates for contact with drinking water.

Ideal for surfaces with increased requirements for resistance to chemicals (including acids), aggressive water, fuels, oils, and the like. Suitable for the jointing and gluing of tiles on working surfaces in kitchens and laboratory workbenches, gluing of stone sills and thresholds.

This product is not suitable for expansion joints.

COLOUR SHADES:

According to the manufacturer's colour chart.

COMPOSITION:

Two-component, epoxy-resin based material – component B, epoxy hardening agent (mixture of aliphatic and cycloaliphatic amines) - component A, mineral fillers and pigments resistant to UV radiation, chemical and atmospheric influences (including long-term effect of swimming pool water).

TECHNICAL PARAMETERS:

MANDATORY				
Abrasion resistance	max. 126 mm ³	Shrinkage	0.3 mm/m	
Bending strength after storage in a dry state	min. 33.7 MPa	Water absorption after 240 min	max. 0.01 g	
Compressive strength after storage in a dry state min.	min. 84.4 MPa	Reaction to fire	Class E	

NOTE: The technical parameters are determined under standard conditions (23 ± 2) °C and (50 ± 5) % of relative air humidity.

INFORMATIVE					
Temperature for processing					(20±5)°C
Mixing ratio of components (A : B),	by weight				10 : 1
Mixing ratio of components (A : B), by volume				10 : 2.1	
Mixing time (minimum)			2 min		
Pot life (workability):			at 20°C		max. 70 min
			over 25°C		10-15 min
Time to beginning of cleaning					30-40 min
Setting time (waiting time - final wa	lking surface)				min. 24 hours at (20±3)°C
LASSELSBERGER, s.r.o.	TEL	+420 378 021 11	1	BANK DETAIL	S: Česká spořitelna, a. s.
Adelova 2549/1	FAX	+420 378 021 11	9	6221912/080	0
320 00 Plzeň - Jižní Předměstí	E-MAIL	info@rako.cz Company ID		number 25238078	
Czech Republic	WEB	www.rako.cz		Tax ID numbe	er CZ25238078

The company is registered in the Companies Register, administered by the Regional Court in Plzeň, Section C, File 22719

RAKO SYSTEM

TECHNICKÝ LIST /

Hardening time – loadable with chemicals	5-7 days at (20±3)°C
Heat resistance (after hardening)	- 40°C-95°C

mosaic 50 x 50 mm	joint 3 x 3 mm	approx. 0.7 kg/m ²
wall tiles 100 x 100 x 6 mm	joint 3-5 mm	approx. 0.6-1 kg/m ²
wall tiles 100 x 100 x 10 mm	joint 3-5 mm	approx. 1-1.6 kg/m ²
wall tiles 200 x 200 x 8 mm	joint 3-5 mm	approx. 0.4 to 0.7 kg/m ²
wall tiles 300 x 300 x 10 mm	joint 3-5 mm	approx. 0.4 to 0.6 kg/m ²
wall tiles 120 x 240 x 12 mm	joint 3-5 mm	approx. 1.2 to 2 kg/m ²
	wall tiles 100 x 100 x 6 mm wall tiles 100 x 100 x 10 mm wall tiles 200 x 200 x 8 mm wall tiles 300 x 300 x 10 mm	wall tiles 100 x 100 x 6 mm joint 3-5 mm wall tiles 100 x 100 x 10 mm joint 3-5 mm wall tiles 200 x 200 x 8 mm joint 3-5 mm wall tiles 300 x 300 x 10 mm joint 3-5 mm

*) Depending on the width of joints, size and shape of tiles 0.4-2 kg/m².

BASE PREPARATION:

The joints must be clean, free of dust, grease, and other impurities. Residues of adhesive must be scraped up to a uniform depth (min. 3 mm) before it hardens. Jointing can be performed only after sufficient maturation of the adhesive (cement adhesives - at least 3 days after tile gluing; vitrified non-absorbent wall tiles and floor tiles - at least 5 days after gluing, and 5-7 days for non-absorbent bases). The tiled surfaces and joints must be fully dry!

PROCESSING:

The entire content of hardening agent **B** should be added to base component **A**, and mixed thoroughly for at least 2 minutes, using a low-speed mixer, to create a homogeneous material. During mixing, the temperature of both components must be at 15-20°C. Using a rubber smoother, apply the mixed jointing material diagonally into joints to fill the joints completely without cavities. The joints are washed with water after 30-40 minutes, using a cleaning cloth first, then a fine sponge is used (the sponge should be often rinsed with clean water). After cleaning, only a thin water film should be visible on the jointed surface. Adequate ventilation is needed to ensure rapid drying of remaining water. The mechanical load is possible after 24 days. The jointed tiles can be loaded with chemicals after 7 days.

Cleaning:

The hardened bloom can only be removed using the CL 805 special cleaning agent – it is necessary to prevent the action of this product on the joints.

CAUTION:

- The general rules specified in ČSN 73 3451 should be followed when designing and laying of ceramic tiles.
- It is inadmissible to add additional binders, fillers, and other additives.
- The temperature of the material, base and air must be in the range of +15 to +25°C during processing!
- The material should not be used on unglazed ceramic products!
- Unused residues of grouting material can be disposed of <u>after hardening</u> as construction wastes.
- Unused residues of component A and component B (including contaminated containers) should be disposed of as hazardous wastes (see the Safety Data Sheet).

FIRST AID:

In the event of health problems, or if in doubts, if swallowed accidentally, and after eye contact, always seek medical advice immediately and provide your doctor with the information from this Safety Data Sheet. If inhaled, remove the victim to fresh air, ensure rest, and prevent underheating. In contact with skin, remove immediately contaminated clothing. Wash the contaminated skin with plenty of water. Do not use thinners or solvents. In case of contact with eyes, rinse eyes under running water for at least 15 minutes and seek medical advice. If swallowed, do not induce vomiting, rinse mouth with water and let drink about 1/2 litre of clean water. Seek medical advice.

SAFETY AND HYGIENE REGULATIONS:

Component A: Warning symbol: Xi irritant, N dangerous for the environment

- R 36/38 Irritating to eyes and skin.
 - R 43
 May cause sensitization by skin contact.

 R 51/53
 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 - S 2 Keep out of the reach of children.
 - S 28 After contact with skin, wash immediately with plenty of warm water.
 - S 37/39 Wear suitable gloves and eye/face protection
 - S 46 If swallowed, seek medical advice immediately and show this container or label.
 - S 61 Avoid release to the environment. Refer to special instructions or Safety Data Sheets.

Component B : Warning symbol: C corrosive, N dangerous for the environment

- R 21/22 Harmful in contact with skin and if swallowed.
 - R 35 Causes severe burns.
- R 41Risk of serious damage to eyes.R 42/43May cause sensitization by inhalation and skin contact.

5	2		
LASSELSBERGER, s.r.o.	TEL	+420 378 021 111	BANK DETAILS: Česká spořitelna, a. s.
Adelova 2549/1	FAX	+420 378 021 119	6221912/0800
320 00 Plzeň - Jižní Předměstí	E-MAIL	info@rako.cz	Company ID number 25238078
Czech Republic	WEB	www.rako.cz	Tax ID number CZ25238078

The company is registered in the Companies Register, administered by the Regional Court in Plzeň, Section C, File 22719

SYSTEM

TECHNICKÝ LIST /

- R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- S 1/2 Keep locked up and out of the reach of children.
- S 23 Do not breathe spray. S 24/25 Avoid contact with skin and eyes.
- In case of contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water. Wear suitable protective clothing gloves, and eye/face protection. S 26
- S 28
- S 36/37/39
- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S 45
- If swallowed, seek medical advice immediately and show this container or label. S 46
- S51 Use only in well-ventilated areas.
- S 61 Avoid release to the environment. Refer to special instructions or Safety Data Sheets.

STORAGE:

Store the product in a well-ventilated and dry storage place in original, tightly closed containers, at temperatures 15-20°C, protected from damage. Keep away from direct sunlight. Each storage place must be equipped with a collecting basin. Storage areas must meet all the requirements for the storage of flammable substances, hazard class IV (Unsuitable extinguishing media – water). If the storage conditions are met, the shelf life will be 12 months. The expiration date is specified on the packaging.

SHIPPING:

The product is supplied in 5 kg or 10 kg plastic containers (component B is inserted in the container) on pallets wrapped in foils.

QUALITY:

- The product quality is regularly checked in the manufacturer's laboratories.
- Proving the conformity of products is ensured by TZÚS Prague, Authorised body 204. •
- This product complies with the requirements of Ministry of Health Decree No. 38/2001 Coll., on hygienic requirements for products intended to come in contact with
- foodstuffs, and Ministry of Health Decree No. 409/2005 Coll., on hygiene requirements for products coming into direct contact with water and for water treatment.
- The manufacturer and distributor apply a certified quality management system, according to ISO 9001

DISTRIBUTOR:

LASSELSBERGER, s.r.o., Adelova 2549/1, 320 00 Pilsen – Jižní Předměstí

VALIDITY:

Since 1 January 2016

We reserve the right to make any changes that are the result of technical progress. This issue cancels and supersedes all previous issues.

LASSELSBERGER, s.r.o.	TEL	+420 378 021 111
Adelova 2549/1	FAX	+420 378 021 119
320 00 Plzeň - Jižní Předměstí	E-MAIL	info@rako.cz
Czech Republic	WEB	www.rako.cz

BANK DETAILS: Česká spořitelna, a. s. 6221912/0800 Company ID number 25238078 Tax ID number CZ25238078