

AD 321

R2 epoxy adhesive



Two-component epoxy adhesive for the gluing of all types of wall and floor tiles in chemically stressed internal and external environments.

DECLARATION:

Improved adhesive on the basis of reactive resin, type/class R2 according to EN 12004 + A1.

APPLICATION:

Frost-resistant epoxy adhesive for the gluing of ceramic tiles (including large-format tiles), fine stoneware, natural and artificial stone panels, glass and porcelain mosaics, insulation and other building panels. It is recommended to use this product in food and chemical plants, laboratories, water parks, and swimming pools (including thermal pools with salt water).

It is suitable for internal and external environments – on bases where stress and volume changes can not be excluded (such as heated floors, terraces, and swimming pools). This product can also be used for levelling wall and floor surface irregularities before the laying of ceramic tiles - in this case, it is possible to add dry silica sand up to 30% of the adhesive weight.

The adhesive is stable, waterproof, resistant to aggressive waters and ageing, shows high initial adhesion, resistant to saponification and splitting under the action of water, resistant to alkali and diluted inorganic and organic acids, and solvent-free.

COMPOSITION:

Component **A** – dispersion of pigments and fillers, mixed with low-molecular liquid epoxy resins, modified with a mono-functional reactive solvent, and additives. Component **B** – dispersion of pigments and fillers in aliphatic aminoamide (hardening agent).

TECHNICAL PARAMETERS:

MANDATORY			
Use in practice:	Internal and external installation of tiles on the wall or on the floor		
Initial shear adhesion strength	min. 2.0 MPa	Reaction to fire	Class E
Shear adhesion strength: - after water contact - after heat shock		Release of dangerous substances	See the Safety Data Sheet
		Withering time (open time): - tensile adhesion strength min. after 20 minutes	min. 0.5 MPa

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

INFORMATIVE	
Mixing ratio	4 : 1 For example: 4 kg of component A (resin) + 1 kg of component B (hardening agent)
Pot life at a temperature of +18°C *)	about 90 minutes (do not prepare at a temperature below +15°C)
Temperature resistance	from -25°C to +80°C
Final walking surface	after approx. 16 hours
Jointing	after approx. 24 hours
Chemical stress	after approx. 7 days
Approximate coverage:	tooth height of 6 mm approx. 3.6 kg/m ²
	tooth height of 8 mm approx. 4.5 kg/m ²

*) High temperatures accelerate the setting process and low temperatures slow down the setting process.

LASSELSBERGER, s.r.o.
Adelova 2549/1
320 00 Plzeň - Jižní Předměstí
Czech Republic

TEL +420 378 021 111
FAX +420 378 021 119
E-MAIL info@rako.cz
WEB www.rako.cz

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

TECHNICKÝ LIST /

BASE PREPARATION:

The base must be mature, load-bearing, stabilised, free of dust, grease, loose particles, detachable layers (should be removed by blasting, milling, and the like). Examples of suitable bases include: concrete, lightweight concrete and foamed concrete, lime cement, cement, and gypsum plasters, gypsum plasterboard, cement screeds and screeds on the basis of on calcium sulphate, sanded asphalt screed materials (only in internal areas), old ceramic tiles (only in internal areas), and assembled building panels. Concrete structures must be mature for min. 6 months, and cement screeds for min. 28 days; heated floors must show the prescribed residual absolute humidity (cement floors max. 2%, screeds on the basis of calcium sulphate max. 0.5%). Plaster bases and ground screeds on the basis of calcium sulphate must be penetrated with SE 4, and allowed to dry for at least 24 hours. When used on surfaces subject to moisture or direct water, the base must be treated with appropriate damp-proofing materials.

PROCESSING:

Resin component **A** should be thoroughly mixed with component **B** – the use of a stirrer is recommended (approx. 600 min⁻¹). Errors in mixing can be avoided by repeated stirring after transferring the mixture to a clean container. After this, do not mix the adhesive any more, and process it within 90 minutes. Using a smooth side of the trowel, the material is applied on the substrate and spread with a toothed side of the trowel. The trowel tooth size is chosen according to the size of the tiles to be laid. The "FLOATING" method is used for walls and floors. For highly stressed surfaces, such as permanently wet working areas and tiles in external environments, the "FLOATING-BUTTERING" method is recommended. The tiled surfaces can be jointed with the **GE EASY** epoxy jointing material after 24 hours.

Cleaning:

Using a foam trowel, wipe the fresh adhesive off the tiled surface before it hardens, then wash the surface with clean water. The hardened residues of adhesive can only be removed using the **CL 805** special cleaning agent.

CAUTION:

- When working, handling and storing this product, the safety instructions specified on the packaging, or in the Safety Data Sheet, should be followed!
- This adhesive can be processed only at a temperature above +10°C!
- Working tools should be cleaned immediately after use!
- Unused residues of **AD 321** adhesive can be disposed of after hardening 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).
- Only completely emptied and clean packaging may be handed over to recycling.

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 hypothermia. 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, rinse mouth with water and let drink about 1/2 litre of clean water. Do not induce vomiting. 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: **Xi irritant**

R 41	Risk of serious damage to eyes.
R 43	May cause sensitization by skin contact.
R 52/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S 2	Keep out of the reach of children.
S 23	Do not breathe spray.
S 25	Avoid contact with skin and eyes.
S 26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 28	After contact with skin, wash immediately with plenty of water.
S 36/37/39	Wear suitable protective clothing gloves, and eye/face protection.
S 46	If swallowed, seek medical advice immediately and show this container or label.
S 51	Use only in well-ventilated areas.
S 61	Avoid release to the environment. Refer to special instructions or Safety Data Sheets.

STORAGE:

The product should be stored in a dry place at a temperature between 15 and 25°C. If the storage conditions are not met, the guarantee period will be 12 months. The expiration date is specified on the packaging.

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

SHIPPING:

The product is supplied in the 5 kg plastic packaging.

QUALITY:

- The product quality is regularly checked in the manufacturer's laboratories.
- The production control system is used in manufacture.
- Proving the conformity of products is ensured by TZÚS Prague, NO 1020.
- 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 August 2013

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

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