



Kerapoxy Adhesive



Two-component, epoxy adhesive with no vertical slip for ceramic tiles and stone material



CLASSIFICATION ACCORDING TO EN 12004
Kerapoxy Adhesive is an R2T class reactive (R), improved (2) adhesive with no vertical slip (T).

WHERE TO USE

Internal and external bonding of ceramic, porcelain and stone to floors and walls, on all substrates normally used in the building industry.

Some application examples

- Bonding of all types and forms of ceramic tiles.
- Rigid bonding of bullnose and special ceramic tile shapes.
- Bonding tiles in fibreglass swimming pools.
- Bonding marble doorsteps and windowsills.

TECHNICAL CHARACTERISTICS

Kerapoxy Adhesive is a two-component, epoxy resin-based high strength mortar with silica sand and special additives, according to a formula developed in MAPEI's own research laboratories.

When the two components are mixed together, a thixotropic mix is obtained which can be easily applied, even on vertical surfaces, at a thickness of up to 1 cm in one single coat.

Kerapoxy Adhesive has the following characteristics:

- excellent durability and resistance to ageing;

- perfect bonding on all types of substrate commonly used in the building industry;
- hardens by chemical reaction without shrinking, becoming extremely strong.

RECOMMENDATIONS

- Do not add water or solvents to **Kerapoxy Adhesive** to increase workability.
- Use the product at temperatures between +10°C and +30°C.
- The packages are pre-dosed and, therefore, it is not possible to make mixing ratio errors. Do not rough guess the quantities when mixing the two components: hardening will be compromised if the catalysing ratio is wrong.
- If residues of the product remain attached to the tiles, use water for cleaning while the residue is still fresh. Use **Pulicol** if the product is hard, or remove mechanically.
- **Kerapoxy Adhesive** must not be used for sealing flexible joints or those which are subject to movement (use **Mapesil AC** or **Mapeflex PU21**).
- **Kerapoxy Adhesive** must not be used on wet surfaces.
- **Kerapoxy Adhesive** must not be used on dirty or crumbly surfaces.

TECHNICAL DATA (typical values)		
PRODUCT IDENTITY		
	component A	component B
Consistency:	thick paste	thick paste
Colour:	grey	beige
Density (g/cm³):	1.8	1.4
Dry solids content (%):	100	100
Brookfield viscosity (mPa·s):	800,000 (# F - 5 rpm)	130,000 (# 7 - 10 rpm)
Storage:	24 months in its original, closed containers. Store component A at a temperature of at least +10°C to avoid crystallisation of the product; reversible by heating up	
Hazard classification according to EC 1999/45:	irritant irritant Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet	
Customs class:	3506 91 00	
APPLICATION DATA (at +23°C and 50% R.H.)		
Mixing ratio:	component A : component B = 80 : 20	
Brookfield viscosity of mix (mPa·s):	530,000 (# F - 5 rpm)	
Density of the mix (kg/m³):	1,490	
Pot life of mix:	45 minutes	
Application temperature range:	from +10°C to +30°C	
Open time (according to EN 1346):	60 minutes	
Adjustment time:	130 minutes	
Set to light foot traffic:	after 10-12 hours	
Ready for use:	2 days	
FINAL PERFORMANCE		
Bond (shear strength) according to EN 12003 (N/mm²):		
– initial bond:	7	
– bonding after immersion in water:	4	
– bonding after thermal shock:	4	
Resistance to humidity:	excellent	
Resistance to ageing:	excellent	
Resistance to solvents and oil:	good	
Resistance to acids and alkalis:	good	
In service temperature range:	from +20°C to +100°C	

APPLICATION PROCEDURE

Preparation of the substrate

The substrate must be well cured, mechanically strong, dry and free from flaking parts, grease, oil, paint, wax etc.

Cementitious substrates must not shrink after laying the tiles. Therefore, during good weather, the curing time must be at least one week per centimetre of thickness, unless screeds are made using a special MAPEI binder such as **Mapecem**, **Topcem** or with **Mapecem Pronto** or **Topcem Pronto**. If these guidelines are not followed, the bond of **Kerapoxy Adhesive** to the substrate could be compromised.

On ferrous surfaces, rust must be removed by sand-blasting.

On gypsum, plaster-board and anhydrite surfaces, we recommend consolidating the surface by applying a coat of **Primer EP** or **Mapeprim SP**. Anhydrite surfaces must be additionally mechanically abraded prior to priming.

Preparation of the mix

The two components which make up **Kerapoxy Adhesive** are supplied in pre-dosed tubs.

- part A: grey-white colour, 80 parts by weight;
- part B: beige colour, 20 parts by weight.

The ratio between the two components is compulsory, and any modification may cause the product to harden incorrectly.

Pour the catalyst (part B) into the container with part A and mix well until a smooth paste is obtained. We recommend using a low-speed electric mixer to guarantee perfect bonding, and to avoid overheating of the mix which would reduce working times. Stir from the bottom and the sides to ensure a uniform dispersion of all components. Use the mix within 45 minutes of its preparation.

Application

Spread the adhesive onto the substrate using a suitable notched trowel. If the adhesive is used for bonding special tile shapes such as *torelli*, also fill the gaps on the back of the piece with the **Kerapoxy Adhesive** mix before laying. Press the pieces to be bonded by pressing them together to guarantee good buttering. Once set, the bond will be very tough.

The surrounding temperature effects the hardening time of the product. At +23°C it remains workable for approximately 45 minutes, and this time reduces as the temperature increases.

SET TO LIGHT FOOT TRAFFIC

Floors may be stepped on after 10-12 hours at +23°C.

READY FOR USE

The surfaces may be put into service after 2 days.

Cleaning

Tools and containers may be cleaned while the product is still fresh using plenty of water. Once **Kerapoxy Adhesive** has set, they may only be cleaned mechanically or with **Pulicol**.

CONSUMPTION

Consumption is 1.5 kg/m² per millimetre of thickness.

PACKAGING

10 kg kits:
component A: 8 kg tubs;
component B: 2 kg cans.

STORAGE

Kerapoxy Adhesive remains stable for at least 24 months if stored in its original, sealed packaging.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Kerapoxy Adhesive irritates the eyes, respiratory tract and the skin. May cause allergic reactions if it comes into contact with the skin. Avoid contact with the skin and eyes, and always use protective gloves and goggles. If it comes into contact with the skin, wash thoroughly with plenty of soap and water and, if a rash appears, seek medical advice. If the product comes into contact with the eyes, rinse well and immediately with plenty of clean water and seek medical advice.

Kerapoxy Adhesive comp. A is hazardous for the environment. Avoid release to the environment, must be treated as hazardous waste.

For further and complete information about a safety use of our product please refer to our latest version of the Material Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application: for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the **Technical Data Sheet**, available from our web site www.mapei.com.au

**All relevant references
for the product are available
upon request and from
www.mapei.com**



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