



Kerapoxy 4 LVT

Two-component epoxy grout for LVT floorings



WHERE TO USE

Use for grouting LVT ("Luxury Vinyl Tiles") on interior floors and walls. Due to its durability, **Kerapoxy 4 LVT** is particularly suitable in highly stressed commercial areas or wet areas (for instance showers, bathrooms, wellness centres, etc.).

When used in combination with **Ultrabond Eco MS 4 LVT** silylated polymer-based reactive adhesive (or the thixotropic version **Ultrabond Eco MS 4 LVT Wall**), along with the most suitable substrate preparation products, sealants for these types of application as well as the anti-slip finish **Mapecoat 4 LVT** it forms a complete, safe system for installing LVT in damp environments, including walls and floors in shower cabins.

TECHNICAL CHARACTERISTICS

Kerapoxy 4 LVT is a two-component, epoxy resin-based product, with silica sand and other special components. It has a very low emission of volatile organic compounds, an excellent resistance to acids and is very easy to clean.

Kerapoxy 4 LVT has a bacteriostatic agent, preventing from the proliferation of bacteria and the formation of mould on the surfaces of grouts, making tiled surfaces hygienic and safe, thanks to the innovative BioBlock® technology developed as a result of MAPEI research.

Kerapoxy 4 LVT is characterized by excellent workability, highly improved compared with traditional epoxy mortars thanks to its creamy consistency, which guarantees faster application times and makes it easier to clean the surfaces, with less waste and easier to obtain a good finish.

When applied correctly, it produces LVT joints with the following characteristics:

- excellent mechanical strength and resistance to chemicals, therefore excellent durability;
- smooth and compact surface finish which is non-absorbent and easy to clean; guarantees a high level of hygiene and blocks the formation of mildew and mould;
- high degree of hardness, excellent resistance to intense traffic;
- no shrinkage and, therefore, no cracking;
- uniform colour, resistant to dirt pick-up.

RECOMMENDATIONS

- Even if it already seems clean after passing over the surface with a rubber float, always clean the surface using a Scotch-Brite® pad and water, to emulsify traces of resin on the surface which could otherwise modify the final surface finish.
- **Kerapoxy 4 LVT** does not guarantee perfect bonding if the edges of the tiles are wet or contaminated with cement, dust, oil, grease, etc. during grouting.
- Do not add water or solvents to **Kerapoxy 4 LVT**.
- Use the product at temperatures between +15°C and +30°C.
- The packages are pre-dosed and, therefore, it is not possible to make mixing errors if all the contents are mixed together. Do not rough guess the quantities when mixing the two components: hardening will be compromised if the catalysing ratio is wrong.
- If hardened and **Kerapoxy 4 LVT** has to be removed from the joints, use an industrial hot air blower, being careful not to ruin the LVT surface.

APPLICATION PROCEDURE

Preparation of the joints

Make sure the adhesive used for bonding the LVT is dry

Kerapoxy 4 LVT



Installation of LVT with grout lines



Applying Kerapoxy 4 LVT with a rubber trowel



Initial cleaning with Scotch-Brite®

TECHNICAL DATA (typical values)

PRODUCT IDENTITY

	component A	component B
Consistency:	thick paste	gel
Colour:	available in 6 colours	
Density (g/cm ³):	1.85	0.98
Dry solid content (%):	100	100
Brookfield viscosity (mPa·s):	1,200,000	250,000

APPLICATION DATA (at +23°C and 50% R.H.)

Mixing ratio:	component A : component B = 9 : 1
Consistency of the mix:	creamy paste
Density of the mix (kg/m ³):	1,600
Pot life:	45 minutes
Application temperature range:	from +15°C to +30°C
Set to light foot traffic:	12 hours
Ready to use:	3 days

FINAL PERFORMANCE

Flexural strength (EN 12808-3) (N/mm ²):	38
Compressive strength (EN 12808-3) (N/mm ²):	49
Abrasion resistance (EN 12808-2):	147 (loss in mm ³)
Water absorption (EN 12808-5) (g):	0.05
Resistance to humidity:	excellent
Resistance to aging:	excellent
Resistance to oil and solvents:	very good
Resistance to acids and alkalis:	excellent
In service temperature range:	from -20°C to +100°C

and/or set. Grout joints must be clean and dry.

Preparation of the mix

Pour the catalyser (part B) into the container of part A and mix well until a smooth paste is obtained. We recommend using a low-speed electric mixer to guarantee perfect blending, and to avoid overheating of the mix which would reduce working times. Use the mix within 45 minutes of preparation.

Application

Spread **Kerapoxy 4 LVT** over the tiled surface with a special MAPEI grout float, making sure that the joints are filled right down to the bottom. With the edge of the same float, strike off excess material.

Cleaning and finishing

After grouting with **Kerapoxy 4 LVT**, floor and wall coverings must be cleaned while the grout is still "fresh". Cleaning of the joints may be carried out using a small amount of water and an abrasive sponge for cleaning joints (such as Scotch-Brite® or MAPEI kit for cleaning joints), followed by a cellulose

sponge, taking care to avoid removing grout from the joints. The sponge must be saturated with water when cleaning wall coverings.

The liquid residual may be removed with the same sponge, which must be replaced when it becomes too impregnated with resin, and the same technique may be used when finishing off the grouted joints. After the finishing operation, it is very important that no traces of **Kerapoxy 4 LVT** remain on the surface. Once hardened, it is very difficult to remove. Therefore, rinse the sponge often with clean water during cleaning.

In the case of very large floor surfaces, finishing may be carried out by wetting the surface and using a single-head rotary machine with special abrasive felt disks such as Scotch-Brite®. Residual liquid may be drawn off using a rubber squeegee.

Kerapoxy Cleaner (special cleaning solution for epoxy grout) may also be used for the final cleaning cycle and may also be used to remove thin residues of grout up to several hours after application. In this case, the product must be left to react for longer



(at least 15-20 minutes). The efficiency of **Kerapoxy Cleaner** depends on the amount of residual resin and how much time has passed since application. Cleaning must always be carried out while the product is still “fresh” as described above.

SET TO LIGHT FOOT TRAFFIC

Floors may be subjected to foot traffic after 12 hours at +20°C.

READY TO USE

After 3 days, the surfaces may be subjected to wear and water.

Cleaning

Tools and containers may be cleaned while the product is still fresh using plenty of water. Once **Kerapoxy 4 LVT** has set, it may only be removed mechanically or with **Pulicol 2000**.

CONSUMPTION

Consumption rates vary according to the width of the joints and the size of the plates (see table overleaf).

PACKAGING

Kerapoxy 4 LVT is supplied in pre-dosed packages. It is contained in 2 kg tubs which contain component A and a canister containing component B, which must only be added at the moment it is required.

COLOURS AVAILABLE

Kerapoxy 4 LVT is available in 6 colours (112 medium grey - 114 anthracite - 130 jasmine - 134 silk - 120 black - 146 rich brown).

STORAGE

Kerapoxy 4 LVT may be stored up to 24 months in its original packaging in a cool, dry place. Store component A at a temperature of at least +10°C to avoid crystallisation of the product, reversible by heating up.

SAFETY INSTRUCTION FOR PREPARING AND APPLICATION

Kerapoxy 4 LVT component A is irritant for the eyes and skin. Both component A and B may cause sensitization if they come in contact with the skin of predisposed subjects.

Kerapoxy 4 LVT component B is corrosive and may cause burns. Furthermore, it may irritate the respiratory tract. The product contains low weight epoxy resins that may cause sensitization if cross-contamination with other epoxy compounds occurs. During use wear protective gloves and goggles and take the usual precautions for handling chemicals. In case of contact with the eyes

and the skin wash immediately with plenty of water and seek medical attention. It is recommended to work in well-ventilated areas and to wear a face mask with filter in case of insufficient ventilation.

Furthermore, **Kerapoxy 4 LVT** component A and B are dangerous for aquatic life, do not dispose of it in the environment.

For further and complete information about the safe use of our product please refer to the latest version of our 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 website www.mapei.com

LEGAL NOTICE

The contents of this Technical Data Sheet (“TDS”) may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in force at the time of the MAPEI product installation.

The most up-to-date TDS can be downloaded from our website www.mapei.com.

ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.



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



Cleaning and finishing with a sponge



Cleaning where required with Kerapoxy Cleaner

Kerapoxy 4 LVT



CONSUMPTION RATES (kg/m²) ACCORDING TO THE SIZE OF THE TILES/PLANKS AND THE WIDTH OF THE JOINTS

Size of tiles/planks (mm)	Width of joint (mm)			
	2	3	4	5
300x300x2	0.04	0.05	0.09	0.11
300x600x2	0.32	0.05	0.06	0.08
300x900x2	0.03	0.04	0.06	0.07
450x450x2	0.03	0.04	0.06	0.07
450x900x2	0.02	0.03	0.04	0.05
500x500x2	0.03	0.04	0.05	0.06
600x600x2	0.02	0.03	0.04	0.05
600x900x2	0.02	0.03	0.04	0.04
300x300x2.5	0.05	0.08	0.11	0.13
300x500x2.5	0.04	0.05	0.08	0.10
300x900x2.5	0.04	0.05	0.07	0.09
450x450x2.5	0.04	0.05	0.07	0.09
450x900x2.5	0.03	0.04	0.05	0.07
500x500x2.5	0.03	0.05	0.06	0.08
600x500x2.5	0.03	0.04	0.05	0.07
600x900x2.5	0.02	0.03	0.04	0.06
100x900x2	0.07	0.11	0.14	0.18
150x900x2	0.05	0.07	0.10	0.12
160x1000x2	0.05	0.07	0.09	0.12
160x1200x2	0.05	0.07	0.09	0.11
180x1200x2	0.04	0.06	0.08	0.10
180x1400x2	0.04	0.06	0.08	0.10
200x1200x2	0.04	0.06	0.07	0.09
220x900x2	0.04	0.05	0.07	0.09
220x1200x2	0.03	0.05	0.07	0.09
250x1200x2	0.03	0.05	0.06	0.08
100x900x2.5	0.09	0.13	0.18	0.22
150x900x2.5	0.06	0.09	0.12	0.15
160x1000x2.5	0.06	0.09	0.12	0.15
160x1200x2.5	0.06	0.09	0.11	0.14
180x1200x2.5	0.05	0.08	0.10	0.13
180x1400x2.5	0.05	0.08	0.10	0.13
200x1200x2.5	0.05	0.07	0.09	0.12
220x900x2.5	0.05	0.07	0.09	0.11
220x1200x2.5	0.04	0.06	0.09	0.11
250x1200x2.5	0.04	0.06	0.08	0.10

FORMULA FOR THE COVERAGE CALCULATION

$$\frac{(A + B)}{(A \times B)} \times C \times D \times 1.6 = \frac{\text{kg}}{\text{m}^2}$$

A = length of tiles/planks (mm)
B = width of tiles/planks (mm)
C = thickness of tiles/planks (mm)
D = width of joint (mm)



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