Code: P1073 2024/07 GCC/EN

Super Bio

Mineral adhesive for high adhesion, high-performance laying of ceramic tiles.

Super Bio develops an extended open and adjustability time meaning even highly porous tiles can be quickly and safely laid on very absorbent substrates.

1. Floors and walls, for internal and external use
2. Thicknesses up to 10 mm
3. Suitable for laying single and double-fired ceramic tiles on mineral or cement-based substrates
4. Open time ≥ 30 min.
5. With no vertical slip

GREENBUILDING RATING
REF. GBR DATA REPORT 07.24
APPROVED

Rating 4 White
Rating 3 Grey

W	G	
✓	✓	Regional Mineral ≥ 60%
×	×	Recycled Regional Mineral ≥ 30%
✓	×	CO_2 Emission ≤ 250 g/kg
✓	✓	VOC Low Emission
✓	✓	Recyclable

kerakoll

Areas of application

→ Use

Substrates:
- cement plasters and cement-lime mortar
- mineral or cement-based screeds
- gypsum and anhydrite (1)
- on plasterboard (1)

(1) After application of Active Prime Fix or Active Prime Grip

Materials:
- ceramic tiles
- ceramic mosaic
- porcelain tiles (contact Kerakoll Gulf Technical Department before any application)

Uses:
- floors and walls
- internal use – external use
- domestic
- commercial
- industrial

Do not use:
- on old ceramic floors, marble tiles or natural stone
- on underfloor heating systems
- on highly flexible substrates
- on plastic or resilient materials, metals, timber
- on moistened substrates or substrates subject to moisture rising
- in environments where water is always present
- on organic-based, reactive waterproofing products (such as RM according to EN 1489)

Instructions for use

→ Preparation of substrates

All substrates must be free from dust, oil and grease, dry and free from any rising damp, with no loose, flaky or imperfectly anchored parts such as residual traces of cement, lime and paint, which must be totally removed. The substrate must be stable and without cracks, must have already completed the hygrometric shrinkage curing period and must present suitable mechanical resistance levels. Uneven areas must be corrected in advance with suitable finishing products.
Substrates with weak surface consistency: screeds and plasters which present a weak crystalline structure in the initial mm of thickness and which can be easily abraded must be consolidated by means of Keradur Eco, the eco-friendly, water-based depth consolidant, to be applied with one or more coatings and according to the instructions, until a surface has been obtained which is still absorbent but compact.
Highly absorbent substrates: when laying on screeds and plasters which are compact but highly absorbent, in warm climates and with direct ventilation, it is advisable to apply in advance one or more coatings of Active Prime Fix or Active Prime Grip primers according to the instructions.

→ Preparation

Mixing water (EN 12004):
Grey ≈ 29% ± 2.4%

Mixing water on-site
Grey ≈ 5.4 – 6.2 l / 1 bag

The amount of water indicated on the packaging is indicative. It is possible to obtain mixtures with consistency of variable thixotropy according to the application to be made.
Prepare Super Bio in a clean container, first of all pouring in a quantity of water equal to approximately ¾ of that which will be required. Gradually add Super Bio to the container, mixing the paste from the bottom upwards with a low-rev (≈ 400/min) helicoidal agitator. Add water until a fluid, smooth, lump-free mixture is obtained. The mixture must be of smooth consistency and without any lumps. For best results, and to mix larger quantities of adhesive, a stirring device with vertical blades and slow rotation is recommended. The amount of water indicated on the packaging is indicative. It is possible to obtain mixtures with consistency of variable thixotropy according to the application to be made. Adding extra water does not improve the workability of the product, and may cause shrinkage in the plastic phase of drying and result in less effective final performance with a reduction in compressive strength and adhesion to the substrate.

Instructions for use

→ Application
Super Bio should be applied with a suitable toothed spreader, to be chosen according to the size and characteristics of the rear surface of the tiles. It is best to use the smooth part of the trowel to spread a fine initial layer, pressing down hard so as to obtain maximum adhesion to the substrate and to regulate water absorption, after which the thickness can be adjusted as required by tilting the spreader at an angle. Spread the adhesive over a surface area which will allow for the laying of the surface materials within the indicated open time, and check for suitability at regular intervals. The open time may vary considerably even during the application, depending on various factors such as exposure to sunlight, air currents, absorbency level of the substrate, temperature and relative air humidity. Press any tile sufficiently to ensure complete and even contact with the adhesive itself. In environments subject to heavy traffic and in external locations,use the double-spread technique to ensure 100% application of the product to the rear of the tiles. In general, ceramic tiles do not require preliminary treatment, however these materials should be checked to ensure there are no traces of dust, dirt or surface coatings of any kind that are not properly anchored to the substrate or which may modify the absorbency characteristics of the tiles.
Respect structural, fractionizing, and perimeter joints present in the substrates. Abide by local existing provisions when creating elastic expansion joints.

→ Cleaning
Clean the tools and any residues of the product from the surfaces using water while the adhesive is still fresh. Once hardened, the adhesive can only be removed by mechanical means.

Special notes

→ Special applications: the replacement of mixing water with Top Latex Eco, the eco-friendly elastic agent, provides the adhesive with greater capacity of transversal deformation and greater resistance to water and tensile strength without modifying the open and adjustability time. Super Bio with the addition of Top Latex Eco exceeds the performance required by standard EN 12004 class C2 TE. Consult the Kerakoll Gulf Technical Department to define use of this product in such applications as: laying on deformable ceilings and walls in plasterboard, laying on heat-radiant slabs, laying of large-format paving slabs in external applications and in permanently damp environments, direct bonding on substrates in smoothed concrete with reduced water absorption.

Certificates and marks

C1 TE
EN 12004

GEV-EMICODE EC 1 PLUS very low emission

Abstract

High-performance laying of ceramic tiles will be carried out with eco-friendly, single-component, mineral adhesive with high adhesion, compliant with standard EN 12004 – class C1 TE, GreenBuilding Rating Eco 3, such as Super Bio by Kerakoll Spa. Substrates must be compact, with no loose, flaky material, clean and fully cured, having already completed the curing period for hygrometric shrinkage. A ____ mm toothed spreader must be used for an average coverage of ≈ ___ kg/m². Existing joints must be respected, create elastic fractionizing joints every ___ m² of continuous surface. Ceramic tiles must be laid with joint-gap spacers with a width of ____ mm.

Technical Data compliant with Kerakoll Quality Standard		
Appearance	grey and white pre-mixed	
Pack	20 kg bags	
Shelf life	≈ 12 months from production in the original sealed packaging, protect from humidity	
Thickness	≤ 10 mm	
Temperature range for application	from +5 °C to +40 °C	
Pot life at +23 °C	≈ 4 hrs	
Open time to +23 °C	≥ 30 min.	EN 12004-2
Correction time at +23 °C	≈ 30 min.	
Grouting of joints at +23 °C:		
- on walls	≈ 12 hrs	
- on floor	≈ 24 hrs	
Ready for use at +23 °C:		
- foot traffic	≈ 24 hrs	
- heavy traffic	≈ 4 days	
Coverage per mm of thickness	≈ 1.4 kg/m²	

Values taken at +23 °C, 50% R.H. and no ventilation. Data may vary depending on specific conditions at the building site, i.e.temperature, ventilation and absorbency level of the substrate and of the materials laid.

Performance		
VOC Indoor Air Quality (IAQ) - Volatile organic compound emissions		
Conformity	EC 1 plus GEV-Emicode	Cert. GEV 4975/11.01.02
HIGH-TECH		
Shear adhesion on ceramic biscuit after 28 days	≥ 1 N/mm²	ANSI A-118.1
Tensile adhesion on concrete after 28 days	≥ 0.5 N/mm²	EN 12004-2
Durability test:		
- adhesion after heat ageing	≥ 0.5 N/mm²	EN 12004-2
- adhesion after water immersion	≥ 0.5 N/mm²	EN 12004-2
Working temperature	from -30 °C to +80 °C	
Conformity	C1 TE	EN 12004

Values taken at +23 °C, 50% R.H. and no ventilation. Data may vary depending on specific conditions at the building site.

Warning

→ Product for professional use
→ abide by any standards and national regulations
→ do not use the adhesive to correct substrate irregularities greater than 10 mm
→ lay and press tiles onto fresh adhesive, making sure it has not formed a surface skin
→ protect against direct rain and freezing for at least 24 hrs
→ the temperature, ventilation and absorption of the substrate and covering materials, may vary the adhesive workability and setting times
→ use a toothed spreader suitable for the format of the tiles
→ use the floating and buttering method for all external laying
→ if necessary, ask for the safety data sheet
→ for any other issues, please contact the Kerakoll Worldwide Global Service - info@kerakoll.ae