

# Super Eco

**Certified, eco-friendly, mineral adhesive for high adhesion, high-performance laying, ideal for use in GreenBuilding. Single-component with low CO<sub>2</sub> emissions and very low volatile organic compound emissions, recyclable as an inert material at the end of its life.**

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



**GREENBUILDING RATING®**

**Super Eco**  
 - Category: Inorganic Mineral Products  
 - Class: Mineral Adhesives  
 - Rating: Grey Eco 4 / White Eco 5

 eco4 Grey	 eco5 White	 Natural mineral content	 Recycled mineral content	 CO <sub>2</sub> /kg emission	 Low Emission IAQ	 Recyclable
		Grey 76% White 79%	White 59%	Grey 166 g White 145 g	Very low VOC emissions	Can be recycled as inert material

RATING SYSTEM ACCREDITED BY CERTIFICATION BODY SGS

**PRODUCT STRENGTHS**

- Super Eco white contains recycled raw materials
- Floors and walls, for internal and external use
- Thicknesses up to 10 mm
- Suitable for laying single and double-fired ceramic tiles on mineral or cement-based substrates
- Open time ≥ 30 min.
- Adjustability time ≥ 40 min.

**ECO NOTES**

- Formulated with locally-sourced minerals meaning lower greenhouse gas emission during transportation
- Can be recycled as mineral inert material, avoiding waste disposal costs and environmental impact
- The white version contains recycled materials thereby reducing the damage to the environment caused by extracting pure raw materials

**AREAS OF USE**

**Use**  
 laying ceramic tiles on walls and floors. Thicknesses of up to 10 mm.

**Materials:**

- ceramic tiles
- ceramic mosaic

**Substrates:**

- cement plasters and cement-lime mortar
- cement-based screeds
- mineral screeds Rekord® Eco Pronto, Keracem® Eco Pronto and Keracem® Eco Prontoplus
- screeds with mineral binders Rekord® Eco and Keracem® Eco

Flooring and walls, for internal and external use, in domestic, commercial and industrial applications, also in areas subject to freezing.

**Do not use**  
 On gypsum-based plasters or renders and anhydrite-based screeds without the previous application of the eco-friendly water-based surface isolation product Primer A Eco; on plasterboard; on old ceramic floors, marble floor tiles, natural stone, on heat-radiant slabs; on highly flexible substrates; on plastic or resilient materials, metals, wood; on wet substrates or substrates subject to continuous moisture rising; in environments where water is always present.

\* ÉMISSION DANS L'AIR INTÉRIEUR Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).

## INSTRUCTIONS FOR USE

### Preparation of substrates

In general, cement-based substrates must be free of dust, oil and grease, dry and free from moisture rising, with no loose or imperfectly anchored parts such as residues of cement, lime and paint coatings, which must be completely 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.

**High-absorbency substrates:** on screeds and plasters which are compact but highly absorbent, in warm climates and with direct ventilation, it is advisable to apply in advance Primer A Eco, the eco-friendly, water-based surface isolation, with one or more coatings and according to the instructions, to reduce water absorption and to improve spreadability of the adhesive.

### Preparation

Prepare Super Eco in a clean container, first of all pouring in a quantity of water equal to approximately 3/4 of that which will be required. Gradually add Super Eco to the container, mixing the paste from the bottom upwards with a low-rev ( $\approx 400$ /min) helicoidal agitator. Add more water until the desired consistency 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. Specific polymers with high-dispersion properties ensure that Super Eco is immediately ready for use. The amount of water indicated on the packaging, is an approximate value and will vary between Super Eco white and grey. 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.

### Application

Super Eco 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.

### Cleaning

Residual traces of Super Eco can be removed from tools and covered surfaces with water before the product hardens.

## 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 Eco with the addition of Top Latex Eco exceeds the performance required by standard EN 12004 class C2 E. Consult the Kerakoll Worldwide Global Service 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.

**Elastic joints:** insert desolidarisation and elastic fractionizing joints every 20/25 m<sup>2</sup> in internal applications, every 10/15 m<sup>2</sup> in external applications and every 8 metres in long, narrow applications.

## ABSTRACT

*Certified, high-performance laying of ceramic tiles with eco-friendly, single-component, mineral adhesive for high adhesion, compliant with standard EN 12004 – class C1 E, GreenBuilding Rating Eco 5 (Eco 4 Super Eco grey), such as Super Eco 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  $\approx$  \_\_\_\_ kg/m<sup>2</sup>. Existing joints must be respected, create elastic fractionizing joints every \_\_\_\_ m<sup>2</sup> 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	White or grey pre-mixed	
Apparent volumetric mass	White $\approx$ 1.39 kg/dm <sup>3</sup> / Grey $\approx$ 1.44 kg/dm <sup>3</sup>	UEAtc/CSTB 2435
Mineralogical nature of inert material	silicate – crystalline carbonate	
Grading	$\approx$ 0 - 800 $\mu$ m	
Shelf life	$\approx$ 12 months in the original packaging in dry environment	
Pack	bags 25 / 5 kg	
Super Eco white mixing water	$\approx$ 8.2 $\ell$ / 1 x 25 kg bag – $\approx$ 1,7 $\ell$ / 1 bag 5 kg	
Super Eco grey mixing water	$\approx$ 7,9 $\ell$ / 1 x 25 kg bag – $\approx$ 1.6 $\ell$ / 1 x 5 kg bag	
Specific weight of the mixture	White $\approx$ 1.58 kg/dm <sup>3</sup> / Grey $\approx$ 1.55 kg/dm <sup>3</sup>	UNI 7121
Pot life	$\geq$ 8 hrs	
Temperature range for application	from +5 °C to +35 °C	
Maximum thickness obtainable	$\leq$ 10 mm	
Open time	$\geq$ 30 min.	EN 1346
Adjustability	$\geq$ 40 min.	
Foot traffic	$\approx$ 24 hrs	
Grouting	$\approx$ 8 hrs on walls / $\approx$ 24 hrs on floors	
Interval before normal use	$\approx$ 7 days	
Coverage *	$\approx$ 2,5 - 4 kg/m <sup>2</sup>	

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 absorptency level of the substrate and of the materials laid.

(\*) Can vary depending on the irregularity of the substrate and the format of the tile.

## PERFORMANCE

### VOC INDOOR AIR QUALITY (IAQ) - VOLATILE ORGANIC COMPOUND EMISSIONS

Conformity	EC 1-R plus GEV-Emicode	GEV certified 2938/11.01.02
<b>HIGH-TECH</b>		
Shear adhesion on ceramic biscuit after 28 days	$\geq$ 1 N/mm <sup>2</sup>	ANSI A-118.1
Tensile adhesion on concrete after 28 days	$\geq$ 1 N/mm <sup>2</sup>	EN 1348
Durability test:		
- adhesion after heat ageing	$\geq$ 0,5 N/mm <sup>2</sup>	EN 1348
- adhesion after water immersion	$\geq$ 0,5 N/mm <sup>2</sup>	EN 1348
- adhesion after freeze-thaw cycles	$\geq$ 0,5 N/mm <sup>2</sup>	EN 1348
Working temperature	from -30 °C to +80 °C	
Conformity	C1 E	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, contact the Kerakoll Worldwide Global Service - [globalservice@kerakoll.com](mailto:globalservice@kerakoll.com)

The Eco and Bio classifications refer to the GreenBuilding Rating Manual 2012. This information was last updated in October 2012 (ref. GBR Data Report - 11.12); please note that additions and/or amendments may be made over time by KERAKOLL SpA; for the latest version, see [www.kerakoll.com](http://www.kerakoll.com). KERAKOLL SpA shall therefore be liable for the validity, accuracy and updating of information provided only when taken directly from its institutional website. The technical data sheet given here is based on our technical and practical knowledge. As it is not possible for us to directly check the conditions in your building yards and the execution of the work, this information represents general indications that do not bind Kerakoll in any way. Therefore, it is advisable to perform a preliminary test to verify the suitability of the product for your purposes.

Kerakoll  
Quality  
System

ISO 9001  
CERTIFIED

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