

ULTRABOND ECO 571 2K

Two-component, low viscosity, solvent and water-free polyurethane adhesive for bonding PVC and rubber floorings both internally and externally



WHERE TO USE

Ultrabond Eco 571 2K is used for internal and external bonding of:

- rubber tiles or sheeting (with any type of backing material), even in areas subject to heavy and intense traffic;
- homogenous and heterogeneous PVC floor coverings;
- FRP panels on walls as finishing elements (not for the use of FRP in structural strengthening);
- semi-rigid vinyl floor coverings

ON

absorbent and non-absorbent substrates.

TECHNICAL CHARACTERISTICS

Ultrabond Eco 571 2K is a two-component adhesive made up of part A, which is a dense paste and of part B, which is liquid.

The mixing ratio between the two components is 86:14.

Ultrabond Eco 571 2K is a solvent and water-free polyurethane adhesive for indoor and outdoor applications, particularly recommended for floor-layers who are allergic to epoxy and epoxy-polyurethane products.

RECOMMENDATIONS

- Do not lay on substrates subject to rising damp (lay a vapour-proof sheathing layer between the ground and the bearing screed).
- Do not lay on damp concrete.
- Do not use on bituminous surfaces where the bleeding of oil may be present.
- To maintain its workability and setting times, we recommend using **Ultrabond Eco 571 2K** at a temperature between +10°C and +30°C. Before mixing, store component B at more than +5°C. If crystals form in component B (due to being exposed for too long at $\leq +5^\circ\text{C}$) bring it back to a liquid state by standing the container in warm water.
- Do not use **Ultrabond Eco 571 2K** on curved surfaces or on steps if perfect adherence of the coating cannot be guaranteed up to final setting (apply **Mapecontact**, **Adesilex VZ** or **Adesilex LP** in two coats).

APPLICATION PROCEDURE

Preparation of the substrate

The substrates must be dry, flat, have good compressive and tensile strength and must be free of cracks, dust, loose material, paint, wax, oil, rust, laitance and other substances which may impede bonding.

Current industry standards for each country must always be respected.

The maximum acceptable humidity level of the substrate must respect the ruling norms of each country and must be higher than the level prescribed by coatings manufacturers.

It is extremely important to check that there is no rising damp.

Floating screeds installed on lightened sub-layers or insulating material and screeds laid directly on the ground must be installed on a vapor barrier.

If cracks in a substrate need to be repaired, a screed requires consolidation, a quick-drying screed needs to be installed or if the laying surface requires levelling, please refer MAPEI catalogue which illustrates the various products for

recommendations on screed preparation, or contact the MAPEI Technical Services Department.
In the case of disjointed substrates, or those which are not sufficiently smooth, the surface must be smoothed over to make it suitable for laying.

Acclimatization

Before starting laying, make sure that the floor, the coating, the adhesive and the substrate have been acclimatized to the prevailing conditions.

The floor and the floor covering must be unwrapped a few hours before laying. The sheets must be spread out or unrolled to allow them to acclimatize and to reduce the tension caused by the packaging.

Mixing

The two components which make up **Ultrabond Eco 571 2K** are supplied in pre-dosed drums:

- component A: 8.6 parts in weight;
- component B: 1.4 parts in weight.

Mixing must be carried out using a mechanical mixer until an homogenous paste is obtained. The setting time and pot life of the product depend on the surrounding temperature (see relevant table).

Never use the product if the temperature is lower than +5°C, since the setting time will be too long.

In all cases, carefully follow the instructions given by the producer of the floor covering material.

Warning: *the mixing ratio between part A and part B (catalyser) must be strictly adhered to. Any modification to the dosage will interfere with reticulation of the product.*

Laying the product

The trowel to use must be chosen according to the backing of the covering to be laid; for smooth backs, use a MAPEI No. 1 or No. 2 trowel; for rippled, uneven or rough backs, use a No. 3 or No. 4 trowel (refer to the floor covering manufacturers recommendations).

Spread the adhesive uniformly, on an area that permits covering to be carried out in 40-50 minutes, according to the surrounding temperature and the temperature of the substrate.

Laying the floor covering

Follow the indications given by the manufacturer of the floor covering when laying the product.

The floor, in either sheet or tile form, must be applied on **Ultrabond Eco 571 2K** whilst still fresh, within 40-50 minutes at +23°C. It must then be carefully smoothed from the centre towards the outside, to guarantee total contact and removal of any air bubbles from the sides.

If the floor covering is not flat, the deformed parts must be weighed down (with bags of sand or other such material) along with the joints and the ends until the **Ultrabond Eco 571 2K** is completely hardened (12-24 hours).

Special care must be taken when working at high temperatures or with great variations of temperatures (lay the material during the cooler hours of the day).

Floors bonded with **Ultrabond Eco 571 2K** may be walked on after approximately 12-24 hours. Total setting occurs after approximately 3 days at a temperature of +23°C.

Setting times for **Ultrabond Eco 571 2K** according to surrounding temperature:

Temperature in °C	+30	+25	+20	+15	+10	+5
Time in hours	1	2.5	3	5	9	18

CONSUMPTION

Consumption varies according to the uniformity of the substrate or the backing of the floor covering (and therefore, on the type of trowel used):

MAPEI trowel No. 1: 0.35-0.45 kg/m²;

MAPEI trowel No. 2: 0.45-0.55 kg/m²;

MAPEI trowel No. 3: 0.6-0.8 kg/m²;

MAPEI trowel No. 4: 0.8-1 kg/m².

CLEANING

Ultrabond Eco 571 2K may be removed from coatings, tools and clothing with alcohol before hardening takes place. After hardening, it may only be removed mechanically or with **Pulicol 2000**.

PACKAGING

Ultrabond Eco 571 2K is available in 10 and 5 kg drums.

STORAGE

Under normal conditions, **Ultrabond Eco 571 2K** remains stable for at least 12 months if stored in its sealed, original container.

Keep **Ultrabond Eco 571 2K** away from freezing conditions during transport and storage, and avoid exposing it to temperatures lower than +5°C for long periods.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Instructions for the safe use of our products can be found on the latest version of the Safety Data Sheet, available from our website www.mapei.com.

PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)

PRODUCT IDENTITY

	component A	component B
Consistency:	thick paste	fluid liquid
Colour:	grey	brown
Density:	1.65 g/cm ³	1.2 g/cm ³
Dry solids content:	100%	100%
Brookfield viscosity:	150,000 mPa·s (rotor F - 50 RPM)	200 mPa·s (rotor 1 - 50 RPM)
EMICODE:	EC1 Plus - very low emission	

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

Mixing ratio:	component A : component B = 86 : 14
Brookfield viscosity of mix:	30,000 mPa·s (rotor 7 - 50 RPM)
Density of mix:	1,550 kg/m ³
Pot life of mix:	approx. 30 minutes
Recommended application temperature range:	from +5°C to +30°C
Open time:	40-50 minutes
Adjustment time:	70-90 minutes
Start setting time:	approx. 3 hours
End of setting time:	approx. 4 hours
Set to light foot traffic:	after 12-24 hours
Waiting time before putting into service:	after 3 days

FINAL PERFORMANCE DATA

PEEL 90° adhesion test according to ISO 22631 (N/mm):

- PVC:
- rubber:
- FRP panels:

in compliance with ISO 22636

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.

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