

# ULTRABOND ECO S948 1K

One-component, solvent-free, (according to TRGS 610) silylated polymer-based adhesive with very low emission level of volatile organic compounds (EMICODE EC1 Plus)



[www.blauer-engel.de/uz113](http://www.blauer-engel.de/uz113)

## WHERE TO USE

Suitable for installing all types of multi-layer, pre-finished wood flooring and medium size planks of solid wood up to 15 cm wide.

### Some application examples

**Ultrabond Eco S948 1K** is used for bonding multi-layer pre-finished wood flooring on: cementitious screeds, screeds made using **Mapecem**, **Mapecem Pronto**, **Topcem**, **Topcem Pronto** and similar products, old wooden floors, ceramic, marble, terrazzo, etc. and anhydrite screeds. It is also suitable for heated substrates.

## TECHNICAL CHARACTERISTICS

**Ultrabond Eco S948 1K** is a one-component, silylated polymer-based adhesive without water, solvents (according to TRGS 610), amines and epoxy resin, with very low emission level of volatile organic compounds (EMICODE EC1 Plus). It is manufactured according to a technology developed in MAPEI's own research laboratories and has the following characteristics:

- one-component, ready-to-use product; no catalyst is required, therefore no mixing. If stored correctly, remaining quantities of the product may be used again at a later date;
- GEV certified, as a product with very low emission level of volatile organic compounds (EMICODE EC1 Plus) and Blauer Engel;
- no hazard or warning signs or messages;
- easy to apply with excellent ridge holding;
- 20-30% more yield compared with conventional two-component adhesives, thanks to its low viscosity and free-flowing properties when applied by trowel;
- totally free of solvents (according to TRGS 610);
- easy to remove from hands and pre-finished elements;
- compatible with **Ultracoat Oil** and with the water-based lacquers and undercoats of **Ultracoat** line.

## RECOMMENDATIONS

- Before installing, make sure the rooms have suitable windows and fittings.
- The humidity level in the screed must be compliant with that prescribed by the current standards for the installation of wood, and as indicated in the technical data sheet for the parquet flooring.
- If the substrate is not thoroughly dried, or if the residual humidity is higher than the level prescribed, we recommend the use of a suitable waterproofing primer, such as **Eco Prim PU 1K**, **Primer MF**, **Primer MF EC Plus**, etc.
- If there is a risk of rising damp, a vapour barrier must be installed before laying the screed.
- Do not use **Ultrabond Eco S948 1K** if the temperature is lower than +10°C or higher than +35°C.
- When transported over long distances, thermally insulated containers may be required.

# APPLICATION PROCEDURE

## Preparation of the substrate

The substrate must be checked carefully to assess its condition, and to prepare it for laying parquet flooring.

Cementitious screeds: must be well cured, dry, flat and mechanically strong.

The surface must be free of dust, loose parts, oil, paint, etc.

The level of humidity in the screed must be measured using a carbide hygrometer. To solve problems of residual humidity levels higher than those prescribed for laying, wait until the screed is dry, or apply a suitable waterproofing primer, such as

**Eco Prim PU 1K, Eco Prim PU 1K Turbo, Primer MF, Primer MF EC Plus, Triblock P**, etc.

Cracks in the substrate must be repaired beforehand with a product such as **Eporip, Eporip Turbo, Epojet**, etc.

For installation on surfaces with traces of glue or old existing smoothing compounds, or for multy-layer wood, chipboard, ceramic or natural stone, substrates use **Eco Prim T, Eco Prim T Plus, Eco Prim VG**.

Excessively rough or uneven surfaces should be levelled using a smoothing compound with high mechanical properties, such as **Fiberplan, Ultraplan, Ultraplan Maxi, Nivorapid**, etc., chosen according to the thickness to be installed. Installation may be carried out once it has cured (see the relative product technical data sheet). To install rapid-drying, controlled-shrinkage screeds, use a special MAPEI hydraulic binder: **Mapecem**, which allows for installation after 24 hours, or **Topcem** for installation after 4 days.

**Topcem Pronto** or **Mapecem Pronto** pre-blended, ready-to-use mortar may be used as an alternative, and wood may be laid after 4 days and 24 hours, respectively.

In the presence of light-weight or insulation layers, in case of screeds installed directly on the ground, a vapour barrier must be installed to avoid rising damp.

Old ceramic, marble, etc. floors: must be carefully cleaned and degreased before bonding. The adhesive may only be applied once the surface is dry.

Wooden floors: make sure wooden floorboards are well bonded to the substrate. Remove old paint or wax with sandpaper down to the bear wood, and remove all dust using a vacuum cleaner. The adhesive may then be applied.

Anhydrite substrates: check and follow the instructions of the manufacturer of the screed. Always check if the screed should be sanded and primed.

MAPEI recommends sanding and priming with **Eco Prim PU 1K, Eco Prim PU 1K Turbo, Primer MF** and **Primer MF EC Plus**.

MAPEI refuses any responsibilities if all the screed manufacturer's recommendations have not been followed. In case of doubt do not hesitate to contact your local MAPEI's Technical Services Department.

## Spreading the adhesive

Spread the adhesive on the substrate using a MAPEI notched trowel for wood. Wood has to be laid within approximately 35 minutes under normal temperature conditions (at +23°C and 50% R.H.). If left-over adhesive from previous applications is to be used, open the drum, remove the skin formed on the surface of the adhesive and proceed as above. The skin on the surface helps to preserve the left-over adhesive.

## Laying parquet

The parquet to be laid must be stored in a well-protected, dry area in the original packaging supplied by the manufacturer, it must not be subjected to condensation and must not be stored directly on the ground. **The level of humidity in the wood must comply with the levels indicated by the manufacturer on the technical data sheet.**

When laying, press down firmly to make sure the adhesive is well applied to all the wood. The special rheological properties of **Ultrabond Eco S948 1K** makes final adjustment easy. Leave a joint approximately 1 cm wide around the perimeter of the floor and around columns and other protruding points. Make sure that adhesive does not seep through the joints to avoid dirtying the surface.



Partial removal of the seal extends workability time



Partial removal of the seal increases the storage stability



Low viscosity for simple application on substrates



Easy to trowel



Laying parquet

## SET TO LIGHT FOOT TRAFFIC

Floors may be walked on after approximately 12 hours.

## POLISHING

The floor may be polished after 3 days.

## CLEANING

Ultrabond Eco S948 1K may be removed from floors and tools using **Cleaner L** or other special cleaning solutions while still fresh. Once hardened, it must be removed mechanically or with **Pulicol 2000**.

## CONSUMPTION

800-1200 g/m<sup>2</sup>.

## PACKAGING

15 kg plastic drums.  
Plastic drums containing two 7 kg aluminium bags.  
Plastic drums containing one 7 kg aluminium bag.

## STORAGE

12 months in its original, well-sealed container stored under normal conditions.

## 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](http://www.mapei.com).

Keep out of the reach of children. Ensure good ventilation during and after use and drying. Do not eat, drink or smoke when using this product. In case of contact with skin or eyes, rinse immediately with plenty of water. Do not allow product to reach sewage system, water course or soil. Give only empty containers to recycling. Dried product residues may be disposed of as domestic waste if allowed by local regulation. Product preservative-free. For information for allergic people or the technical data sheet, please call: +39/02/37673.1. Methanol separates during hardening. Ensure constant ventilation when using this product. Ensure proper ventilation for several days after laying the flooring. Wear protective gloves.

*The product contains:*

mineral fillers, binders, additives, drying agent, catalyst, stabilizer, pigments (VdL-RL 01/June 2018).

PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)

PRODUCT IDENTITY	
Consistency:	creamy paste
Colour:	light beige
Density (g/cm <sup>3</sup> ):	1.65 ± 0.05
Dry solids content (%):	100
Brookfield viscosity (mPa·s):	38,000 ± 5,000 (rotor 7 - 50 RPM)
- EMICODE: - Blauer Engel:	EC1 Plus - very low emission DE-UZ 113
APPLICATION DATA (at +23°C and 50% R.H.)	
Recommended application temperature range:	from +10°C to +35°C
Open time (formation of surface skin):	35 minutes
Adjustment time:	100 minutes
Set to light foot traffic:	approx. 12 hours
FINAL PERFORMANCE	
Shore A hardness (7 days at +23°C):	50
Wood-concrete bond (N/mm <sup>2</sup> ):	1.2
Wood-ceramic bond (N/mm <sup>2</sup> ):	1
Elongation at break (7 days at +23°C) (%):	100
In service temperature range:	from -20°C to +80°C

## 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](http://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](http://www.mapei.com).

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