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

MADE

ponc Janc

#### WHERE TO USE

Suitable for installing all types of pre-finished plywood 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 parquet 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, amines and epoxy resin, with very low emission level of volatile organic compounds (EMICODE EC1 R 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;
- suitable for use by installers who are allergic to epoxy and epoxy-polyurethane products;
- GEV certified, as a product with very low emission level of volatile organic compounds (EMICODE EC1 R 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;
- easy to remove from hands and pre-finished elements.
- compatible with **Ultracoat Oil** and with the waterbased 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.
- 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.





Partial removal of the seal extends workability time



Partial removal of the seal allows leftovers of the product to be <u>stored</u> for longer



Low viscosity for simple application on substrates

- 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.

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.

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 rapiddrying, 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 lightening layers or insulation, or in the case of screeds installed directly on the ground, a vapour barrier must be installed to avoid rising damp. Old floors in ceramic, marble, etc. 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 rigidly fixed to the substrate. Remove old paint or wax with sandpaper down to the bear wood, and remove all dust. 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 declines all 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 layer of skin 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 rheologic 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.

# 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 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.

#### STORAGE

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

#### SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION Ultrabond Eco S948 1K is not considered as

dangerous according to the current regulation

# **TECHNICAL DATA (typical values)**

# PRODUCT IDENTITY

In service temperature range:

Consistency:	creamy paste		
Colour:	light beige		
Density (g/cm³):	1.65 ± 0.05		
Dry solids content (%):	100		
Brookfield viscosity (mPa·s):	38,000 ± 5,000 (rotor 7 - 50 RPM)		
- EMICODE: - Blauer Engel:	EC1 R Plus - very low emission RAL UZ-113 For further information refer to the Material Safety Data Sheet		
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 breakage (7 days at +23°C) (%):	100		

from -20°C to +80°C





	parq	





regarding the classification of mixtures. We recommend the use of protective gloves and goggles and to take the usual precautions for handling chemical products. For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet.

Keep out of reach of children. Ensure good ventilation during and after application and drying. Avoid eating, drinking or smoking while processing this product. In case of contact with eyes or skin rinse immediately with plenty of water. Do not allow product to reach sewage system or any water course. Do not allow to penetrate the ground/soil. Only properly emptied containers may be recycled. Dried product residues can be disposed of as normal household waste. Product preservative-free. Methanol separates during hardening. Wear protective gloves. For information for allergic people, please call at +39/02/37673.1.

PRODUCT FOR PROFESSIONAL USE.

#### WARNING

a ans

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



This symbol is used to identify Mapei products which give off a low level of volatile organic compounds (VOC) as certified by GEV (Gemeinschaft Emissionskontrollierte Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.), an international organisation for controlling the level of emissions from products used for floors.



"Der Blaue Engel" is a German mark of ecological quality used to identify products which respect the environment, contractors and end users. MAPEI products carrying this logo have been tested according to strict criteria defined by the German standard RAL-UZ 113 and, because they are all with very low emission of volatile organic compounds, also offer advantages for the environment and public wellbeing.



Our Commitment To The Environment MAPEI products assist Project Designers and Contractors create innovative LEED (The Leadership in Energy and Environmental Design) certified projects, in compliance with the U.S. Green Building Council.

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

