



# Ultrabond Eco VS90



**Acrylic adhesive in water dispersion with a very low emission level of volatile organic compounds (VOC), for bonding vinyl and rubber floor coverings**



## WHERE TO USE

**Ultrabond Eco VS90** is a solvent free, non-staining, multi-purpose adhesive in water dispersion, supplied in an easy to trowel paste that has a very low emission levels of volatile organic compounds (EMICODE EC1) and is suitable for use on all normal absorbent and moisture stable substrates used in construction.

## Some application examples

**Ultrabond Eco VS90** is used for internal bonding of:

- homogeneous and heterogeneous vinyl floors in sheets or tiles;
- semi-rigid vinyl tiles and PVC floor coverings;
- carpet with latex, PVC foam and polyurethane backing;
- smooth-backed, hard-wearing or dimpled rubber flooring with a smooth backing, for internal light traffic applications only;
- textile flooring, including those with a latex mix;
- cork with PVC backing

## ON

all types of traditional absorbent substrates used in the building industry, and which are stable in the presence of humidity.

## TECHNICAL CHARACTERISTICS

**Ultrabond Eco VS90** is a solvent-free, easy-to-spread, synthetic polymer-based adhesive in water dispersion, in the form of a ready-to-use beige-coloured paste.

**Ultrabond Eco VS90** is suitable for bonding resilient floor coverings which are dimensionally stable.

**Ultrabond Eco VS90** has excellent initial bonding properties, and after approximately 10 minutes (under normal temperature conditions) is ready for laying the floor.  
Its open time is approximately 30-40 minutes at +23°C.

**Ultrabond Eco VS90** is not flammable and contains almost no organic compounds (VOC) (EMICODE EC1). Therefore, the adhesive poses almost no danger to the health of those who handle or use the product in environments where it is laid, and may be stored without taking any special precautions.

## RECOMMENDATIONS

- Only lay floor coverings at the recommended temperature, usually between +15°C and +35°C.
- Do not lay on substrates without a protective barrier against rising damp (bee-hive supports without an anti-vapour barrier, damp walls, etc.).
- In areas where there is constant presence of water (e.g. communal kitchens, showers, balconies, open porches, etc.), use **Adesilex G19** or **Adesilex G20**.

| TECHNICAL DATA (typical values)   |   |
|---|---|
| PRODUCT IDENTITY  |   |
| Consistency:  | creamy paste  |
| Colour:   | beige   |
| Volume mass (g/cm³):  | 1.25  |
| pH:   | 8.5   |
| Dry solids content (%):   | 68  |
| Brookfield viscosity (mPa·s):   | 100,000<br>(rotor 6 - rpm 5)  |
| Storage:  | 24 months in its original, sealed packaging.<br>Protect from frost  |
| Hazard classification according to EC 1999/45:  | none.<br>Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet |
| EMICODE:  | EC1 - extremely low emission level of volatile organic compounds  |
| Customs class:  | 3506 91 00  |
| APPLICATION DATA (at +23°C and 50% R.H.)  |   |
| Recommended application temperature range:  | from +15°C to +35°C   |
| Waiting time:   | 10-20 minutes   |
| Open time:  | 30-40 minutes   |
| Step-on time:   | after 6-8 hours   |
| Waiting time before putting into service:   | 48-72 hours   |
| FINAL PERFORMANCES  |   |
| Resistance to humidity:   | good  |
| Resistance to ageing:   | excellent   |
| Resistance to solvents and oil:   | good  |
| Resistance to temperature:  | excellent   |
| Resistance to wheelchairs:  | very good   |
| Under-floor heating systems:  | suitable  |
| Flexibility:  | excellent   |
| PEEL 90° bonding test according to EN 1372 Standards (N/mm):<br>– homogenous PVC:<br>– smooth rubber: | <br>> 1.5<br>> 1.7  |

- On well-rounded edges or corners, use **Adesilex VZ** or **Ultrabond Aqua Contact**.

## APPLICATION PROCEDURE Preparation of the substrate

Substrates must be dry, evenly flat, absorbent, have good compressive and tensile strength and must be free of dust, flaky parts, cracks, paint, wax, oil, rust, traces of gypsum and other substances which may impede bonding.

Current norms and standards for each country must always be respected. The maximum acceptable humidity level is as

follows: for cementitious substrates, a maximum of 2.5-3%; for gypsum or anhydrite-based substrates, a maximum of 0.5%.

It is imperative 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 vapour barrier.

Wherever required: if either 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 to the

catalogues which illustrate the various MAPEI products for indications on screed preparation, or contact the MAPEI Technical Assistance Department.

Where the substrate is uneven and insufficiently smooth enough to be laid onto, the surface should be prepared using MAPEI smoothing compound.

### Acclimatisation

Before installation begins the floor covering, adhesive and the substrate must be acclimatised at the correct temperature indicated.

The floor covering should be unrolled and spread out to allow it acclimatise and reduce the tension caused by packaging.

### Laying the product

Mix the adhesive well in its container before use.

Apply the required amount of **Ultrabond Eco VS90** on the substrate using a suitable serrated trowel. Use either a MAPEI No. 1 or No. 2 trowel according to the substrate and floor covering used, so that the adhesive is evenly spread.

### Laying the floor covering

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

Floor coverings in sheet or tile form must only be applied on **Ultrabond Eco VS90** after the recommended waiting time (from 10 to 20 minutes at +23°C), that is, when the adhesive has reached a certain viscosity level and that it is tacky enough to maintain contact with the substrate.

The tiles or sheets must then be massaged using either a wooden trowel or a roller immediately after laying. Start from the centre and work towards the outside to guarantee perfect coverage and to eliminate any air bubbles.

If a very thin floor covering is applied, make sure that the massaging/rolling operation also removes lines that the adhesive may leave on the surface.

The floor covering may be stepped on with care after 6-8 hours (according to the temperature and absorption of the substrate). The floor is fully ready for use after 48-72 hours.

### Cleaning

**Ultrabond Eco VS90** may be cleaned from floors, coating, tools, hands and clothing while it is still fresh using water. Once dry, it must be cleaned using alcohol or **Pulicol**.

### CONSUMPTION

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

- No. 1 MAPEI trowel: 0.25 kg/m<sup>2</sup>
- No. 2 MAPEI trowel: 0.40 kg/m<sup>2</sup>

### PACKAGING

**Ultrabond Eco VS90** is available in 16 kg drums.

### STORAGE

Under normal conditions, **Ultrabond Eco VS90** remains stable for at least 24 months if stored in its sealed, original container.

### SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

**Ultrabond Eco VS90** is not considered as dangerous according to the European regulation regarding the classification of preparations. It is however recommended to use gloves, eyes protection and to take the usual precaution taken when handling chemical products are recommended. The Safety Data Sheet is available upon request for professional users.

FOR PROFESSIONALS.

### WARNING

*While the indications and guidelines contained in this data sheet correspond to the company's knowledge and wide experience, they must be considered, under all circumstances, merely as an indication and subject to confirmation only after long-term, practical applications. Therefore, anybody who undertakes to use this product, must ensure beforehand that it is suitable for the intended application and, in all cases, the user is to be held responsible for any consequences deriving from its use.*



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



**Our Commitment To The Environment**  
More than 150 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](http://www.mapei.com)**

Ultrabond  
ECO VS90

