



Ultrabond VS90



Eco Plus



Universal high temperature adhesive for resilient floor coverings

WHERE TO USE

Hard set, highly shear resistant, wet-bed dispersion adhesive, specific for PVC and rubber floorings and wall coverings on absorbent substrates. Also suitable as universal adhesive for all common resilient and textile floor covering types.

For use on floors and walls in interior applications.

Suitable on:

- level and absorbent surfaces;
- underfloor heating systems.

It can be used for:

- static and dynamic loads, including intense load, in residential, commercial and industrial sectors (e.g. in hospitals, shopping centers, airports, etc.);
- stresses from chair castors according to EN 12529.

Some application examples

Use **Ultrabond Eco VS90 Plus** for bonding:

- sheet and tile rubber flooring with smooth or textured surfaces;
- homogeneous and heterogeneous PVC floor coverings, sheets and tiles;
- PCV and multilayer PVC floor coverings;
- LVT (Luxury Vinyl Tiles).

Also suitable as universal adhesive for bonding:

- textile floor coverings with all common backings (latex-primed, PVC and polyurethane foam, natural jute and Action-Bac® backed carpets, etc.);
- needle-punch woven flooring also in latex;

- flocked flooring;
- semi-flexible vinyl floor tiles (VCT);
- linoleum with natural jute backing;
- polyurethane, polyolefin and synthetic back linoleum flooring;
- polyolefin-based and chlorine-free floor coverings;
- PUR floor coverings;
- PVC and rubber wall coverings.

TECHNICAL CHARACTERISTICS

Ultrabond Eco VS90 Plus is a solvent free, acrylic adhesive in water dispersion, formulated in a ready to use light beige paste. Characterised by a fast and strong initial grab and a rapid set, as well as a rigid and cohesive final film, it gives the floor coverings a very good dimensional stability.

Product properties:

- very easy to apply;
- little to no waiting time;
- excellent wetting even with difficult covering;
- rapid set development;
- very good peel strength;
- highly shear resistant;
- very good dimensional stability;

TECHNICAL DATA (typical values)	
PRODUCT IDENTITY	
Consistency:	creamy paste
Colour:	beige
Density (g/cm ³):	1.25
pH:	8
- EMICODE: - Blauer Engel:	EC1 Plus - very low emission RAL-UZ 113 For further information please refer to the Material Safety Data Sheet
APPLICATION DATA (at +23°C - 50% R.H.)	
Application temperature range:	from +15°C to +35°C
Waiting time:	5-10 minutes
Open time:	20-30 minutes
Set to light foot traffic:	3-5 hours
Ready for use:	24-48 hours
FINAL PERFORMANCE DATA	
PEEL 90° adhesion test according to EN 1372 (N/mm): - homogeneous PVC: - heterogeneous PVC: - smooth rubber: - linoleum: - carpet with Action Bac®:	} in compliance with EN 14259

- prevents open joints;
- exposure to castor wheels in accordance with DIN EN 12529;
- solvent free;
- non-flammable;
- EMICODE EC1 Plus (very low emission);
- Blauer Engel - RAL UZ 113;
- harmless to the health of the installer and the end-user.

RECOMMENDATIONS

- Install in recommended temperatures, normally between +15°C and +35°C.
- Do not install on substrates not protected from rising damp.
- Use **Adesilex G19** or **Adesilex G20** in the event of extreme temperatures due to solar radiation, intense mechanical stress by lift truck, forklift, etc. or moisture from above (in particular when the floor coverings are not welded or sealed).
- In case of multilayer cork planks with PVC backing, use **Ultrabond Eco 310**.

APPLICATION PROCEDURE

Preparing the substrate

Substrates must be dry, absorbent, level,

sound, mechanically strong, free of dust, loose particles, cracks, paints, wax, oil, rust, traces of gypsum or other products that can interfere with bonding.

On non-absorbent substrates, apply a suitable MAPEI smoothing compound to a minimum thickness of 3 mm.

A British Standard approved test should give a reading of 75% RH or less, if this has not been achieved the use of a MAPEI Surface Membrane will suppress residual / static moisture in a power floated concrete slab or sand/cement screed, provided that a base dpm has been incorporated.

For gypsum and anhydrite substrates the maximum humidity level should be 0.5% as measured with a carbide hygrometer, and in all cases, no higher than the level recommended by the manufacturer of the floorcovering.

The regulations of each country must be strictly followed.

It is essential to make sure there is no rising damp present. Unbonded screeds laid over lightweight concrete or over insulation and screeds laid directly onto earth must be separated by a vapour barrier to prevent rising damp.

To repair cracks in the substrate, consolidate and waterproof screeds, form new fast-drying screeds and level uneven substrates, please refer to the relevant technical documentation or contact the MAPEI Technical Services Department.

Acclimatisation

Before starting the installation, make sure that the floor or wall covering and the substrate are acclimatised to the recommended temperatures and R.H.

Spreading the adhesive

Ultrabond Eco VS90 Plus is ready to use and does not need any preparation. Before using, stir the adhesive in the bucket. Apply the adhesive evenly to the substrate with a suitable notched trowel.

When installing thin wall coverings, a long nap roller may be used as an alternative (ensure the wetting of the backing material).

Installing the flooring

Follow the manufacturer's instructions

Leave a waiting time according to the application quantity, climatic conditions, substrate absorbency and type of covering. Only apply as much adhesive as can be covered within the open time and with good transfer to the backing of the covering. Lay the floor covering whilst still wet: the adhesive ridges has to be impressed.

Take care to avoid air pockets and carefully rub the floor covering down to ensure good adhesive transfer to the backing.

Avoid excessive stress at the seams. After some minutes installing the floor covering, it is always necessary to carefully roll it down again or to firmly rub it down.

Note: *waiting and open time may vary depending on temperature, relative humidity and absorbency of the substrate. They will be shorter at higher temperatures and lower humidity, but longer at lower temperatures, higher humidity and with low absorbent substrates.*

Cleaning

While still wet, **Ultrabond Eco VS90 Plus** can be cleaned from floor coverings, tools, hands and clothing with water. When dry, clean with alcohol or a suitable solvents.

CONSUMPTION

Consumption varies with uniformity of substrate, the back of the flooring and type of trowel used.

MAPEI trowel no. 1:	approx. 250-300 g/m ²
MAPEI trowel no. 2:	approx. 350-450 g/m ²
Roller:	approx. 200 g/m ²
Notch TKB A1/A2:	approx. 200-300 g/m ²
Notch TKB B1:	approx. 300-350 g/m ²
Notch TKB B2:	approx. 350-450 g/m ²

PACKAGING

Ultrabond Eco VS90 Plus is available in 5 kg and 15 kg drums.

STORAGE

Under normal conditions, **Ultrabond Eco VS90 Plus** is stable for at least 12 months in its original sealed packaging. Protect from frost.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Ultrabond Eco VS90 Plus is not considered dangerous according to the current regulation regarding the classification of mixtures. It is

recommended to wear protective gloves and goggles and to take the usual precautions for handling chemicals.

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. Clean tools with soap and water immediately after use. Only properly emptied containers may be recycled. Dried product residues can be disposed of as normal household waste. Product contains: MIT / BIT (1:1) and CIT/MIT (3:1).

For information for allergic people, please call at 0121 508 6970.

PRODUCT FOR PROFESSIONAL USE.

N.B.

Whilst we try to ensure that any advice, recommendations or information given in our literature is accurate and correct, we have no control over the circumstances in which our product is used. It is therefore important that the end users satisfy themselves that the product and conditions are suitable for the envisaged application.

No warranty can be given or responsibility accepted other than, that the product supplied by us will meet our written specification.

End users should ensure that our latest product data and safety information sheets have been consulted prior to use.

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 (Gesellschaft 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

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BUILDING THE FUTURE

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