



Ultrabond Eco V4 Evolution



www.blauer-engel.de/uz113

Universal “all in one” adhesive with fast and strong initial tack and long open time for resilient and textile floor and wall coverings



WHERE TO USE

High performance adhesive in water dispersion, specific for PVC, LVT and rubber flooring in commercial project as well as universal adhesive for all common floor covering types. Particularly suitable for the installation of modular LVT. For use on floors and walls in interior applications.

Suitable as wet-bed adhesive on:

- level, absorbent surfaces;
- underfloor heating systems.

It can be used for:

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

Also suitable as transitional pressure-sensitive adhesive for bonding dimensionally stable floor coverings on impervious, non-absorbent substrates.

Some application examples

Use **Ultrabond Eco V4 Evolution** for bonding:

- homogeneous and heterogeneous PVC floor coverings, sheets and tiles;
- CV and multilayer PVC floor coverings;
- rubber floorings (sheets and tiles, including multilayer floor coverings with acoustic or foam underlay).

Suitable also as a universal adhesive for:

- LVT (Luxury Vinyl Tiles);
- modular LVT;

- SPC, rigid-core and hybrid, LVT;
- semi-flexible vinyl floor tiles (VCT);
- textile floor coverings with all common backings (latex-primed, PVC and polyurethane foam, natural jute and Action-Bac®, etc.);
- needle-punch woven flooring also in latex;
- flocked textile flooring;
- linoleum with natural jute backing;
- polyurethane, polyolefin and synthetic back linoleum flooring;
- polyolefin-based and chlorine-free floor coverings (PO);
- PUR floor coverings (PU);
- PVC and rubber wall coverings;
- indoor sport floorings.

TECHNICAL CHARACTERISTICS

Ultrabond Eco V4 Evolution is a solvent free, synthetic polymer-based adhesive in water dispersion, formulated in a ready to use light beige paste. Due to its particular formulation and extended open time, it can be used as wet-bed adhesive for all kind of floorings on absorbent substrates, as well as transitional pressure-sensitive adhesive for bonding dimensionally stable floor coverings on impervious, non absorbent substrates.

Ultrabond Eco V4 Evolution



Installation of MODULAR LVT with Ultrabond Eco V4 Evolution



Installation of RUBBER with Ultrabond Eco V4 Evolution



Installation of homogeneous PVC with Ultrabond Eco V4 Evolution

TECHNICAL DATA (typical values)	
PRODUCT IDENTITY	
Consistency:	creamy paste
Colour:	pale beige
Density (g/cm ³):	1,20
pH:	7,70
- EMICODE: - Blauer Engel:	EC1 Plus - very low emissions RAL-UZ 113 For further information please refer to the Material Safety Data Sheet
APPLICATION DATA (at +23°C - 50% U.R.)	
Application temperature range:	from +15°C to +35°C
Waiting time:	10-20 minutes (30-40 minutes on not absorbent substrates)
Open time:	60-70 minutes on absorbent substrates 120 minutes on non-absorbent substrates
Set to light foot traffic:	after 3-5 hours
Ready for use:	24-48 hours
FINAL PERFORMANCES DATA	
PEEL 90° adhesion test according to EN 1372 (N/mm): - homogeneous PVC: - heterogeneous PVC: - LVT: - rubber: - linoleum: - carpet with Action Bac®:	in compliance with EN 14259

Product Properties:

- very easy to apply;
- extended open time;
- fast and strong initial tack;
- excellent wetting of the floor coverings' backing;
- very high peel strength;
- good dimensional stability;
- exposure to castor wheels in accordance with EN 12529;
- solvent free;
- not inflammable;
- EMICODE EC1 Plus (very low emission);
- Blauer Engel - RAL UZ113;
- 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 reactive adhesives (such as **Adesilex G19, Adesilex G20 or Ultrabond Eco Ms 4 LVT**) 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).

APPLICATION PROCEDURE

Preparation of the substrate

Substrates must be dry, 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 smoothing compound to a minimum thickness of 2 mm; alternatively, in case of dimensionally stable floorings, use the product as a "pressure

sensitive”, that is, apply the floor covering after the water has evaporated off and the film of adhesive is touch-dry but still tacky (after approx. 30-40 minutes).

The moisture content must be the one foreseen by the regulations of each country.

It is essential to make sure there is no rising damp present. Un-bonded screeds laid over light-weight 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 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 V4 Evolution 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 alternatively (ensure the wetting of the backing material is warranted).

Installing the flooring

Follow the manufacturer's instructions
Wet bonding (on absorbent substrates)

Leave a waiting time (10-20 minutes) 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. Place the floor covering into the still wet adhesive bed: the adhesive ridges have 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 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.*

Pressure sensitive bonding (only for dimensionally stable floor coverings on impervious substrates)

Only in case of thin or solid color floor coverings, pass a nap roller onto the ridges of the still wet adhesive in order to impress them, before allowing the adhesive to air-dry until it has taken on a uniformly yellowish-transparent colour (approx. 30-40 minutes); it is recommended to test with a finger to make sure it is touch-dry but still tacky. When installing impervious sheet floor

coverings, the Double Drop technique can be used to reduce the time taken waiting for the adhesive to dry. Lay the floor covering on the wet adhesive, press all over to achieve transfer, then pull it back exposing the adhesive. Leave until the adhesive has dried to a firm tack before replacing the flooring accurately in position.

Cleaning

While still wet, **Ultrabond Eco V4 Evolution** can be cleaned from floor coverings, tools and clothings with water. When dry, clean with alcohol or a suitable solvent.

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. 350-400 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 V4 Evolution is available in 5 and 16 kg drums.

STORAGE

Under normal conditions, **Ultrabond Eco V4 Evolution** is stable for at least 12 months in its original sealed packaging. Avoid prolonged exposure to frost.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Ultrabond Eco V4 Evolution 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 the handling of chemicals.

For further and complete information about the safe use of our product please refer to the latest version of our 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 BIT (1:1) and CIT/MIT (3:1). For information for allergic people, please call at +39/02/37673.1.

The product contains:

Dispersion vehicle, inorganic fillers, polymer dispersions, tackifier, preservatives (VdI-RL 01/June 2004).

PRODUCT FOR PROFESSIONAL USE.

WARNING

Although the technical details and recommendations contained in this product



Installation of polyurethane-based flooring with Ultrabond Eco V4 Evolution



Installation of LVT with Ultrabond Eco V4 Evolution



Installation of Linoleum with Ultrabond Eco V4 Evolution

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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.

ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.



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.

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