ULTRABOND ECO VS90 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 heavy 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;
- CV 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;
- polyurethane floor coverings;

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- PVC and rubber wall coverings;
- cork floors and coverings with PVC backing.

TECHNICAL CHARACTERISTICS

Ultrabond Eco VS90 Plus is an 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 of the back of the covering, even if impervious;
- rapid set development;
- very good peel strength;
- highly shear resistant;
- very good dimensional stability;
- prevents open joints;
- exposure to castor wheels in accordance with EN 12529;
- non-flammable;
- EMICODE EC1 Plus (very low emission);
- Blauer Engel DE-UZ 113.

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 frequent rinsing (in particular when the floor coverings are not welded or sealed).
- In case of multilayer cork planks with PVC backing, use **Ultrabond Eco 4 LVT**.

APPLICATION PROCEDURE

Preparation of 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 smoothing compound to a minimum thickness of 2 mm.
The moisture content must comply with the local regulations.
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 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 a suitable quantity of adhesive 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 enough waiting time depending on 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/m²
MAPEI trowel no. 2:	approx. 350-450 g/m²
Roller: approx.	200 g/m²
Notch TKB A1/A2:	approx. 200-300 g/m²
Notch TKB B1:	approx. 300-350 g/m²
Notch TKB B2:	approx. 350-450 g/m²

PACKAGING

Ultrabond Eco VS90 Plus is available in 5 and14 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

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.

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 domestic waste if allowed by local regulations.

Product contains BIT and CIT/MIT (3:1). For information for allergic people, please call at +39/02/37 67 3.1.

The product contains:

dispersion vehicle, mineral fillers, binders, plasticizer, additive, preservatives (Vdl-RL 01/June 2018).

PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)

PRODUCT IDENTITY	
Consistency:	creamy paste
Colour:	beige
Density (g/cm³):	1.25
pH:	8
– EMICODE: **– Blauer Engel:**	EC1 Plus - very low emission DE-UZ 113 For further information please refer to the Safety Data Sheet

APPLICATION DATA (at +23°C - 50% R.H.)	
Application temperature range:	from +15°C to +35°C
Waiting time:	0-10 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 ISO 22631 (N/mm): **– homogeneous PVC:** **– heterogeneous PVC:** **– rubber:** **– linoleum:** **– carpet with Action Bac® backing:**	in compliance with ISO 22636

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

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