

ULTRABOND ECO MS1

One-component, universal silylated polymer-based adhesive for resilient and textile flooring



www.blauer-engel.de/uz113



WHERE TO USE

High performance, universal silylated polymer-based adhesive for bonding all types of resilient and textile flooring. For use on floors in interior applications.

Suitable on:

- properly prepared, absorbent and non-absorbent substrates;
- underfloor heating systems.

The product is particularly suitable for static and dynamic loads, including for heavy wear use in domestic, commercial and industrial locations (e.g hospitals, shopping centers, airports, etc.).

Very tough and highly resistant to shear loads, which makes it particularly suitable for floors exposed to direct sunlight, intense mechanical stress due to forklifts, etc. or which are constantly exposed to water (communal kitchens, showers, etc.).

It can be used for the installation of flooring subjected to stresses from chair castors according to EN 12529.

Some application examples

Use **Ultrabond Eco MS1** for bonding:

- LVT and SPC in tiles and planks.
- homogeneous and heterogeneous PVC floors coverings, sheets and tiles;
- CV and multilayer vinyl floor coverings;
- textile floor covering 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;
- linoleum on natural jute, synthetic, polyolefin or polyurethane back;
- polyolefin-based and chlorine-free floor coverings;
- rubber floorings (sheets and tiles, including multilayer floor coverings with acoustic rubber or foam backing).
- polyurethane-based flooring (PU)
- indoor sports flooring

TECHNICAL CHARACTERISTICS

High performance, universal silylated polymer-based adhesive for bonding all types of resilient and textile flooring.

The adhesive performs very good in terms of shear and peel adhesion strength, as well as dimensional stability, therefore is particularly suitable for LVT flooring.

Once hardened, which takes place by chemically reacting with the moisture in the air, **Ultrabond Eco MS1** forms a tough film resistant to moisture, water and heat that forms a strong bond on all materials normally used in the building industry.

Product properties:

- easy and ready to use, no mixing required;
- low viscosity;
- very easy to apply;

- excellent wetting even with impervious coverings;
- fast setting, even at very low temperature;
- very high peel and shear strength;
- very good dimensional stability;
- easy to clean from hands and from the surface of floorings;
- exposure to castor wheels in accordance with EN 12529;
- not inflammable;
- EMICODE EC1 Plus (very low emission);
- Blauer Engel - DE-UZ 113;
- suitable for installers who are sensitive to epoxy and epoxy/PU products;
- suitable for heavy wear use in domestic, commercial or industrial locations, when a Blauer Engel installation system is required.

RECOMMENDATIONS

- Install in recommended temperatures, normally between +15°C and +35°C.
- Do not install on substrates not protected from rising damp.
- In case of installing floor coverings in rolls onto not absorbent substrates, apply the minimum amount of adhesive necessary to ensure a suitable wetting of the backing; moreover, ensure the presence of an appropriate level of R.H. (> 50%, but not more than that specified by the floor covering manufacturer). Wait 5-10 minutes before starting to install the flooring.

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.

The moisture content must comply with the local 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 respective 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

On first use, open the bucket and remove the sealing aluminium sheet. **Ultrabond Eco MS1** is ready to use and does not need any preparation. Apply the adhesive evenly to the substrate with a suitable notched trowel.

If left-over adhesive from previous applications is to be used, open the bucket, remove the skin formed on the surface (intended to preserve the left-over adhesive), and proceed as above.

Installing the flooring

Follow the manufacturer's instruction.

Apply as much adhesive as can be covered before a surface skin is formed (90-100 minutes at +23°C / 50% R.H.) in order to guarantee a suitable transfer to the backing of the covering.

Lay in 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. 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 and relative humidity. They will be shorter at higher temperatures and higher humidity; they will be longer at lower temperatures and humidity, and in presence of low/not absorbent substrates.*

To preserve the product left-over, after finishing the application we recommend to properly close the bucket laying the previously removed aluminum sheet (or a new one) or a similar polyethylene sheet, to direct contact of the adhesive in order to let escape as much air as possible from the container thus reducing the formation of a surface skin to a minimum.

CLEANING

While still fresh, **Ultrabond Eco MS1** may be removed from floor coverings and tools with a cotton cloth or **Cleaner L**. When dry it can be only mechanically removed or by means of **Pulicol 2000**.

CONSUMPTION

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



MAPEI trowel no. 1: approx. 300-350 g/m²
MAPEI trowel no. 2: approx. 400-450 g/m²
Notch TKB A1/A2: approx. 250-350 g/m²
Notch TKB B1: approx. 350-400 g/m²

PACKAGING

Ultrabond Eco MS1 is available in 15 kg drums.

STORAGE

Under normal conditions, **Ultrabond Eco MS1** is stable for at least 12 months in its original sealed packaging. When transported over long distances, thermally insulated containers may be required.

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. Do not eat, drink or smoke when using this product. In case of contact with eyes or skin rinse immediately with plenty of water. Do not allow product to reach sewage system water course or soil. Give only empty containers to recycling. Dried product residues may be disposed of as domestic waste.

Product preservative-free. For information for allergic people or the Technical Data Sheet, please call: +39/02/37 67 3.1. Methanol separates during hardening.

Ensure constant ventilation when using this product. Ensure proper ventilation for several days after laying the flooring. Wear protective gloves.

The product contains:

mineral filler, binders, drying agent, catalyst, stabilizer, additives (VdI-RL 01/June 2018).

PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)

PRODUCT IDENTITY	
Consistency:	creamy paste
Colour:	ivory white
Density (g/cm ³):	1.5
– EMICODE: – Blauer Engel:	EC1 Plus - very low emission DE-UZ 113

APPLICATION DATA (a +23°C - 50% R.H.)	
Application temperature range:	+15°C to +35°C
Open time:	90-100 minutes
Set to light foot traffic:	5 hours
Ready for use:	24 hours

FINAL PERFORMANCES DATA

Peel 90° adhesion test according to ISO 22631 (N/mm):

- LVT:
- rubber:
- polyolefin:
- linoleum:
- PVC:

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

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.

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