



Eco Prim PU 1K Turbo



One component, solvent-free, moisture curing and rapid drying polyurethane primer with very low emission of volatile organic compounds (V.O.C.) for waterproofing and consolidating cementitious screeds



WHERE TO USE

- Surface consolidation and dust-repelling treatment on cementitious, anhydrite and heated substrates.
- *Waterproofing* cementitious screeds with a residual humidity content higher than the level recommended for laying parquet, and within the limit of 5% for screeds up to 6 cm thick which are not subject to rising damp.

Some application examples

- Consolidating cementitious screeds which are mechanically weak.
- Waterproofing treatment before laying wooden flooring, to prevent a failure due to excessive residual humidity in the cementitious screed.
- Anti-dust treatment for cementitious and dry anhydrite screeds with a crumbly surface.

TECHNICAL CHARACTERISTICS

Eco Prim PU 1K Turbo is a one-component polyurethane primer which hardens due to the humidity present in the surrounding air and in the screed.

Eco Prim PU 1K Turbo is characterised by its short set to light foot traffic period and that it quickly loses tackiness, so that parquet may be laid after a very short time (after approximately 2 hours in normal conditions of temperature and humidity).

Eco Prim PU 1K Turbo does not contain solvents, is odourless and is non-flammable.

Eco Prim PU 1K Turbo has a very low emission level of volatile organic compounds (EMICODE EC1 R).

Because of the total absence of solvents and odour, **Eco Prim PU 1K Turbo** may also be used on sites which are located close to inhabited areas (such as flats, schools, offices, etc.).

After application and rapid curing of the resin, the substrate treated with **Eco Prim PU 1K Turbo** becomes more consistent, harder and is resistant to abrasion.

RECOMMENDATIONS

- Do not dilute **Eco Prim PU 1K Turbo** with water or solvent.
- Do not apply **Eco Prim PU 1K Turbo** on wet surfaces or in the presence of rising damp.
- If a smoothing and levelling compound has to be applied, or if the parquet is to be laid after more than 24 hours, apply **Eco Prim PU 1K Turbo** so that a thin layer remains on the surface. Completely saturate this layer with **Quartz 1.2** while the primer is still fresh.
- The product is suitable for consolidating heated screeds and anhydrite substrates *which cannot be waterproofed*. These kinds of substrates must be dry before applying the primer.
- The laying of wooden flooring on substrates treated with **Eco Prim PU 1K Turbo** must be carried out using a reactive polyurethane adhesive (such as **Ultrabond P990 1K** or **Ultrabond Eco P992 1K**),

TECHNICAL DATA (typical values)	
PRODUCT DETAILS	
Consistency:	liquid
Colour:	brown
Density (g/cm³):	1.20
Maximum residual humidity permitted:	5%, measured with carbide hygrometer (for screeds thicknesses of approx. 6 cm)
Brookfield viscosity (at +23°C) (mPa-s):	300 (#1 - 10 rpm)
Dry solids content (%):	100
Hazard classification according to EC 1999/45:	harmful. Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet
Storage:	12 months. Protect from frost
EMICODE:	EC1 R - extremely low emission level
Customs class:	3208 90 91
APPLICATION DATA (at +23°C - 50% R.H.)	
Application temperature range:	from +5°C to +35°C
Loss of stickiness:	after 30-40 minutes
Set to light foot traffic:	60 minutes
Final hardening time:	after 2 hours
Waiting time between each coat:	min. 40 minutes, max. 2 hours
Waiting time before laying directly with adhesive:	minimum 2 hours, maximum 24 hours
Minimum waiting time before successive treatments on final coat (blinded with Quartz 1.2):	min. 2 hours

an epoxy-polyurethane adhesive (such as **Lignobond** or **Ultrabond P902 2K**) or a sililated-based adhesive (such as **Ultrabond Eco S955 1K**).

APPLICATION PROCEDURE Preparation of the substrate

The screed must be clean and free of oil, wax and dirt. Traditional screeds must be cured for at least 7-10 days per centimetre of thickness, while quick-drying or rapid-drying screeds must be cured according to the manufacturer's instructions for each particular product.

Cracks and surface crazing must be opened and then repaired with **Eporip** or **Eporip Turbo**.

If used for consolidating purposes, make sure that the porosity of the surface is sufficient to allow **Eco Prim PU 1K Turbo** to penetrate.

If the screed is excessively smooth, the surface must be abraded in order to open the pores.

Application of the product

Apply **Eco Prim PU 1K Turbo** with a roller, a brush or flat trowel. On porous substrates, a single coat of the product is usually enough to obtain a good waterproofing and consolidating effect.

For more porous substrates, or substrates in poor condition, a second layer should be applied when the first is suitable to light foot traffic.

If the substrate needs to be rectified with a cementitious smoothing and levelling compound, apply a coat of **Eco Prim PU 1K Turbo**. Make sure there is a thin layer on the surface, and while it is still fresh, apply **Quartz 1.2** until it is completely blinded.

When **Eco Prim PU1K Turbo** has completely hardened, the cementitious smoothing compound may be applied after removing.

As an alternative to sprinkling on quartz, bonding of the smoothing compound may be improved by applying a coat of **Eco Prim T** on the surface of **Eco Prim PU 1K Turbo** when it is dry (after approximately 2 hours).

If the parquet is to be laid directly after 24 hours, prepare the substrate with the Quartz 1.2, as described above to provide a key for the cementitious smoothing and levelling compound.

As an alternative, it may be laid directly on the primer after at least 2 hours and after no more than 24 hours of its application using a reactive adhesive (such as Ultrabond P990 1K, Ultrabond Eco P992 1K, Ultrabond P902 2K or Ultrabond Eco S955 1K).

Cleaning

Eco Prim PU 1K Turbo may be removed from clothing and tools while still fresh using **Thinner PU** or **Cleaner L**.

Once set, it may only be removed using **Pulicol**.

CONSUMPTION

0.2-0.4 kg/m² per coat.

PACKAGING

The product is available in 10 kg drums.

STORAGE

12 months in its original, well-sealed container stored under normal conditions. Protect from frost.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Eco Prim PU 1K Turbo is harmful if inhaled, and irritates the eyes and respiratory tract when present in aerosol form. It may also cause localised rashes if it comes into

contact repeatedly with the skin of those who are allergic. Use protective clothing, gloves and goggles. If the product comes into contact with the eyes, wash well with plenty of clean water and seek medical attention.

Only apply the product in well-ventilated areas and/or use a suitable protective mask to protect against inhaling whenever a mist is caused by the application system.

For further information, please refer to the Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

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 Verlegwerkstoffe, 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**

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