

COATIX® EP 1260 Primer

Solvent-Free Epoxy Moisture Barrier

Product Description

COATIX® EP 1260 Primer is a two-component, solvent-free, low-viscosity, transparent epoxy resin-based moisture barrier and penetrating primer. Thanks to its high penetration capacity, it penetrates the capillary pores of the concrete surface and seals them, preventing moisture from the substrate from damaging the epoxy coating applied over it. It enables epoxy coating systems to be applied on concrete surfaces that are not fully cured or have a high moisture content. It is used as a primer on absorbent and low-absorbency mineral-based surfaces and, when mixed with quartz sand in a suitable ratio, as a binder for levelling, filler and repair mortars.

Areas of Use

- As a moisture barrier on concrete and cementitious screed surfaces with a high moisture content
- On new concrete floors that are not fully cured (where it is not possible to wait 28 days)
- As a penetrating primer on normal and highly absorbent concrete, screed and mineral-based surfaces
- As a primer beneath epoxy and polyurethane floor coating systems and self-leveling applications
- In factories, warehouses, workshops, food and pharmaceutical facilities, cold stores and laboratories
- As a binder for levelling, filler and repair mortars with the addition of quartz sand in a suitable ratio
- Indoors and outdoors, as a primer coat before the top coat

Advantages

- Solvent-free; low-emission, can be applied safely in enclosed spaces
- Penetrates deep into the surface thanks to its low viscosity
- Blocks moisture from the substrate by sealing the capillary pores; forms an effective moisture barrier
- Can cure on damp substrates; curing is not adversely affected by ambient humidity
- Prevents dusting of the concrete surface and increases surface strength
- Improves the adhesion of epoxy and polyurethane coatings applied over it
- Can be used as a binder for levelling, filler and repair mortars with the addition of quartz sand
- Easy to apply by brush, roller, squeegee (rake) or trowel

Technical Properties

General Information	
Material structure	Two-component, solvent-free, transparent, epoxy resin-based (A: resin, B: hardener)
Colour / appearance	Component A (resin): Transparent, low-viscosity liquid Component B (hardener): Transparent – light yellow liquid After application: Transparent, glossy film
Density (mixture)	1.00–1.10 g/cm ³ / 23°C (EN ISO 2811-1)
Viscosity (mixture)	90–180 mPa·s / 23°C
Volatile organic compounds (VOC)	≤ 3 g/L
Solids content	100% (by weight)

Mechanical and Physical Properties	
Shore D hardness (ASTM D 2240 / DIN 53505)	75 ± 5 (7 days / 23°C)
Pull-off adhesion strength (EN 1542 / EN 1504-2)	≥ 2.0 (1.5) ^b N/mm ² – concrete failure
Thermal resistance (continuous)	+50°C (dry conditions)
Thermal resistance (short-term)	+80°C (max. 7 days) +100°C (max. 12 hours)
Application Information	
Mixing ratio (A / B)	80 / 20 (by weight) – 4 / 1 (by volume)
Thinner	Do not thin
Application method	Brush, roller, squeegee (rake) or trowel
Mixing equipment	Low-speed mechanical mixer, 300–500 rpm
Pot life	60–90 min / 23°C, 200 g (DIN 16945)
Consumption (single coat)	200–500 g/m ² (depending on surface absorbency)
Consumption (moisture barrier, 2 coats)	200–400 g/m ² (per coat)
Application temperature (ambient and substrate)	+10°C / +30°C
Permissible substrate moisture	Max. 6% by weight (CM or oven-drying method) Applied as a moisture barrier on substrates above 4%
Ambient relative humidity	Max. 80%
Drying Times	
Dust-dry	6–8 hours / 23°C (EN ISO 9117)
Touch-dry	12–14 hours / 23°C (EN ISO 9117)
Recoat interval	Min. 12 hours – max. 24 hours / 23°C (EN ISO 9117)
Full cure	7 days / 23°C (EN ISO 9117)
Full mechanical and chemical load	7 days / 23°C
Safety Information	
Hazardous substances	Refer to SDS

The technical values stated were obtained at +23°C ambient temperature and 50% relative humidity; times are extended as ambient and surface temperatures fall and shortened as they rise (full cure takes approximately 10 days at +10°C and approximately 4 days at +30°C). As viscosity increases at low temperatures, consumption also increases. Consumption values are theoretical; for exact consumption, a controlled trial application must be carried out on site.

Application Instructions

Surface Preparation

The surface to be coated must be sound and load-bearing. The concrete surface must have a compressive strength of at least 25 N/mm² and a surface tensile (pull-off) strength of at least 1.5 N/mm². Weak parts, laitance and loose particles on the surface must be removed by scarifying, sand/shot blasting or sanding; a rough surface with open pores and exposed aggregate must be obtained. Very glossy and closed-pore surfaces must be roughened by mechanical methods to increase the specific surface area. The surface must be free of adhesion-impairing substances such as dust, oil, tar, paint, silicone, curing compounds, detergent and formwork release oil, and dirt and dust must be removed with an

industrial vacuum cleaner. Cracks, blowholes and damaged areas must be repaired with an epoxy-based repair mortar/putty.

Unlike other epoxy primers, COATIX® EP 1260 Primer can also be applied on damp surfaces; however, there must be no standing (ponded) water on the surface. Ponded water must be removed with an absorbent sponge or squeegee; on very wet substrates, additional ventilation and drying measures must be taken. Where water under negative-side pressure or active rising water is present in the substrate, the product must not be applied; suitable waterproofing must be carried out beforehand.

Moisture Control

Before application, the moisture content of the concrete must be measured with a moisture meter (CM or oven-drying method) and recorded. On substrates where the moisture content exceeds 4% by weight, COATIX® EP 1260 Primer is applied as a moisture barrier. If no moisture meter is available, a 1 m x 1 m plastic sheet is taped to the surface and left for 24 hours (ASTM D 4263); condensation under the sheet indicates that moisture is present in the substrate and that a moisture barrier must be applied. No application is carried out if there is free water on the surface. Attention must also be paid to the dew point before application; the surface temperature must be at least 3°C above the dew point. At low temperatures and high humidity, amine blush (blushing) may occur on the surface.

Mixing

Components A and B are each stirred separately in their own containers for approximately 30 seconds with a low-speed (300–500 rpm) mechanical mixer. All of component B (hardener) is poured into component A (resin) and mixed for 2–3 minutes until a homogeneous mixture is obtained. The mixture is transferred to a clean container and mixed for a further 1 minute; ensure that no unmixed material remains on the sides and bottom of the container. To minimise air entrainment, avoid over-mixing and mixing at high speed.

The mixing ratio A/B is 4/1 (80/20) by weight and must never be altered. If partial mixing is carried out, the ratio must be maintained by weighing. Ensure that the temperature of the product to be mixed is between +15°C and +25°C. No water, solvent or thinner may be added to the mixture, and the product must not be thinned. With large batches, the pot life is shortened and insufficient time remains for application.

Primer Application

The prepared mixture is applied to the prepared surface in thin layers with a brush, roller or squeegee (rake), working it well into the surface. The most suitable method is to draw the material tightly across the surface with a squeegee and then back-roll it in two directions at right angles to each other. Ensure that the entire surface is covered with a continuous, pore-free film. When used as a moisture barrier, the product is applied in at least two coats; the second coat is applied within the recoat interval of the first coat and at right angles to it.

If an epoxy or polyurethane-based coating is to be applied over it, adhesion can be improved by broadcasting quartz sand with a grain size of 0.3–1.0 mm onto the surface at approximately 1 kg/m² while the primer is still wet; after curing, excess unbonded sand is removed by sweeping or vacuuming. Depending on the surface profile, a levelling/filler mortar can be obtained by adding quartz sand (0.1–0.3 mm) to the primer at a ratio of 1:0.5 – 1:2 by weight, and a repair mortar by adding it at a ratio of 1:9. The waiting time between coats must be observed and the recoat interval (max. 24 hours) must not be exceeded; if it is exceeded, the surface must be roughened by mechanical methods.

Limitations

- Apply when the ambient and substrate temperatures are between +10°C and +30°C.
- The substrate temperature must be at least 3°C above the dew point.
- Do not apply on substrates with standing (ponded) water on the surface.
- Not to be applied on substrates with water under negative-side pressure or active rising water; suitable waterproofing must be carried out beforehand.
- The concrete surface must have a compressive strength of at least 25 N/mm² and a surface tensile strength of at least 1.5 N/mm².
- No water, solvent or thinner may be added to the mixture; it must not be mixed with chemicals not approved by the manufacturer.
- The mixture must be used within the specified pot life; mixture that has exceeded its pot life must not be used.
- If the 24-hour interval between coats is exceeded, the surface must be roughened by sanding before the new coat is applied.
- Materials must be brought to the application area at least 24 hours before application so that they adapt to ambient conditions.

- For the first 24 hours after application, the surface must be protected from moisture, condensation and contact with water.
- If application is carried out while temperatures are rising, pinholes may form on the surface; application must be carried out at times when the temperature is constant or falling.
- Avoid application on substrates that are frozen or at risk of frost within 24 hours; if heating is required, use only electric hot-air blowers.
- The product is not used as a top coat; a suitable epoxy or polyurethane coating must always be applied over it.
- Epoxy-based products may yellow and change colour under UV exposure; this does not affect the technical performance of the product.
- For applications involving drinking water or direct food contact, technical service must be consulted.

Cleaning of Tools

All tools and equipment used must be cleaned with COATIX® T 9100 Epoxy Thinner before the material cures. Cured material can only be removed mechanically.

Storage Conditions and Shelf Life

Container lids must be kept closed and label information complete. Follow the first-in, first-out rule and monitor expiry dates. The storage area must be dry, cool and well ventilated. The product must be protected from direct sunlight and frost; if crystallisation is observed in component A, the crystals can be dissolved by heating the container in a controlled manner to between +60°C and +70°C. The product must be stored in compliance with technical safety information and legal requirements. When stored between +15°C and +25°C in a dry, enclosed warehouse in unopened original packaging, the product has a shelf life of 12 months from the date of manufacture.

Safety Precautions

Observe the hazard and precautionary statements, safety signs and warnings on the packaging. Comply with the health and safety information contained in the Safety Data Sheet (SDS) for the product, prepared in accordance with the legislation in force (1907/2006/EC – REACH, Annex II and Regulation (EU) 2020/878).

The product is solvent-free; however, epoxy resins and amine hardeners may cause skin and eye irritation and allergic reactions. Ensure adequate ventilation during application; wear protective goggles, chemical-resistant gloves and work clothing, and a mask where necessary. The product must not come into contact with foodstuffs; food and drink must not be brought into the application area. Avoid direct contact with the product and do not inhale vapours; in case of skin contact, wash with plenty of soap and water; in case of eye contact, rinse with plenty of water and seek medical advice. If swallowed, do not induce vomiting and seek medical advice immediately. Keep sources of ignition away from storage and application areas. Store the product out of the reach of children and pets. The product and its packaging must be disposed of in accordance with the local regulations in force.

Liability

Our company is responsible only for the quality of the product. Any use of the product outside the scope of the written technical recommendations, including incorrect application or use under unsuitable conditions, is entirely the responsibility of the user. For more detailed technical information, please refer to the product catalogue or contact our representatives.

Packaging

Component A 16 kg + component B 4 kg = 20 kg set

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