

COATIX® EP 1150 Primer

Solvent-Free Filled Epoxy Primer

Product Description

COATIX® EP 1150 Primer is a solvent-free, two-component, epoxy resin-based floor primer containing specially graded fillers. It fills the capillary pores of concrete and cementitious mineral surfaces, increases surface strength and acts as a bonding bridge for subsequently applied epoxy coatings, paints or repair mortars. Thanks to its filled structure, it evens out rough and absorbent surfaces and offers ease of application under site conditions.

Areas of Use

- Factories, warehouses, terminals, multi-storey car parks and shopping centres
- Workshops and aircraft maintenance hangars
- Schools, hospitals, laboratories and areas requiring a hygienic environment
- Pharmaceutical, food and paint industry facilities, industrial kitchens and printing works
- Treatment plants and areas where corrosive chemicals are used
- Floors exposed to heavy forklift traffic
- As a primer coat before epoxy and polyurethane-based floor coatings
- As a filler and repair mortar when mixed with suitable aggregate
- Directly as a scratch coat

Advantages

- Solvent-free; provides low emissions during application
- Its filled structure provides ease of application under site conditions
- Excellent adhesion to cementitious surfaces
- Fills the capillary pores of concrete and increases surface strength
- Forms a strong bonding bridge for subsequent epoxy and polyurethane coating layers
- Resistant to chemicals and inorganic acids; high mechanical strength
- Can be used as a filler and repair mortar with the addition of suitable aggregate

Technical Properties

General Information	
Material structure	Two-component, filled, epoxy resin-based (A: resin, B: hardener)
Density (mixture)	1.50 ± 0.1 g/cm ³ / 20°C (EN ISO 2811-1)
Viscosity (mixture)	1,000–1,500 mPa·s
Volatile organic compounds (VOC)	≤ 3 g/L
Solids content	100% (by weight)
Mechanical Properties	
Compressive strength (ASTM D695 / EN ISO 604)	60–70 N/mm ²
Flexural strength (EN 12190)	≥ 20 N/mm ²
Shore D hardness (ASTM D 2240 / DIN 53505)	78 ± 5
Abrasion resistance – Taber (EN 1504-2)	≤ 120 mg / 1,000 cycles

Pull-off adhesion strength (EN 1542 / EN 1504-2)	≥ 2.0 (1.5) ^b N/mm ² – concrete failure
Impact resistance (EN 1504-2)	Class III
Capillary absorption and permeability to water (EN 1504-2)	≤ 0.1 kg/m ² ·h ^{0.5}
Application Information	
Mixing ratio (A / B)	85 / 15 (by weight)
Thinner	Do not thin
Application method	Trowel
Pot life	30–40 min / 20°C, 200 g (DIN 16945)
Consumption	200–600 g/m ² , depending on the surface and application method
Application temperature (ambient and substrate)	+10°C / +30°C
Permissible substrate moisture	Max. 4%
Ambient relative humidity	Max. 80%
Service temperature	0°C / +80°C
Drying Times	
Dust-dry	3–4 hours / 23°C (EN ISO 9117)
Touch-dry	8–10 hours / 23°C (EN ISO 9117)
Full cure	7 days / 23°C (EN ISO 9117)
Recoat interval	Min. 12 hours – max. 24 hours / 23°C
Pot Life (for 200 g mixture)	
+10°C	~ 60 minutes
+20°C	~ 40 minutes
+30°C	~ 20 minutes
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.

Application Instructions

Surface Preparation

Weak parts of the surfaces to be coated must be removed by scarifying, sandblasting (shot blasting) or sanding. If the surface is very glossy, it must be roughened by scarifying or blasting to increase the specific surface area. Uneven surfaces must be levelled with a floor grinding machine. Any oil on the surface must be burnt off or washed with COATIX® T 9100 Epoxy Thinner or a cleaning thinner; dirt and dust must be removed with a vacuum cleaner. If the substrate is concrete, it must be fully cured (28 days) and have a compressive strength of at least 25 N/mm² and a pull-off strength of at least 1.5 N/mm². The substrate temperature must be at least 3°C above the dew point.

Moisture Control

Before application, the moisture content of the concrete must be measured with a moisture meter; the permissible moisture limit is max. 4% and the ambient relative humidity max. 80%. If no moisture meter is available, a 1 m x 1

m plastic sheet is taped to the surface and left for 24 hours; if there is no condensation under the sheet when checked in the morning, application may proceed. Attention must also be paid to the dew point before application.

Mixing

Component A must be stirred mechanically on its own before mixing begins. 3.75 kg of component B (hardener) is added to 21.25 kg of component A (resin) and mixed with a drill fitted with a low-speed (300–400 rpm) mixing paddle until a homogeneous mixture is obtained. To minimise air entrainment, avoid mixing at high speed and for longer than necessary. The mixture must never be prepared by hand or with a trowel.

The entire mixture must be transferred to a clean container and briefly mixed again. Mixtures must be prepared by measuring or weighing, in quantities that can be used within the pot life. With large batches, the pot life is shortened and insufficient time remains for application.

Primer Application

- Before application, wait briefly to allow the air entrained in the mixture to escape.
- On surfaces with low roughness and a near-glossy finish (floors finished with a concrete grinding machine), the COATIX® EP 1150 Primer A+B mixture is applied by trowel at the specified consumption.
- On surfaces of medium roughness (sandblasted or shot-blasted surfaces), COATIX® EP 1150 Primer is mixed with quartz at a ratio of 1.0:0.5 and applied by trowel at the specified consumption.
- On very rough surfaces (scarified or broom-finished concrete surfaces), COATIX® EP 1150 Primer is mixed with quartz at a ratio of 1.0:1.0–1.5 and applied by trowel at the specified consumption.
- Where thickness is required, 200–500 micron or 300–800 micron quartz is broadcast onto the application. On quartz-broadcast surfaces, the recoat interval may be disregarded.
- On surfaces without broadcast quartz, application of the other epoxy coats must begin within 24 hours at the latest (at 23°C). If this time is exceeded, light roughening of the surface is recommended.
- After application is complete, the surface must be closed to foot traffic for at least 24 hours and kept free from contact with water for 48 hours.

Chemical Resistance

Chemical	Concentration	Resistance
Resistance to acids		
Sulphuric acid (H ₂ SO ₄)	10%	3~2
Sulphuric acid (H ₂ SO ₄)	20%	3~2
Hydrochloric acid (HCl)	10%	3~2
Hydrochloric acid (HCl)	20%	3~2
Nitric acid (HNO ₃)	10%	3~2
Nitric acid (HNO ₃)	20%	3~2
Acetic acid (CH ₃ COOH)	10%	3~2
Acetic acid (CH ₃ COOH)	20%	2
Lactic acid (CH ₃ CHOH-COOH)	10%	2
Lactic acid (CH ₃ CHOH-COOH)	20%	2~1
Formic acid (HCOOH)	10%	2
Formic acid (HCOOH)	20%	2~1
Chromic acid (H ₂ CrO ₄)	10%	2
Resistance to alkalis		
Sodium hydroxide (NaOH)	–	3
Resistance to solvents and others		
Xylene	–	2

Chemical	Concentration	Resistance
Ethyl alcohol	–	2
Solvents	–	2

3 Highly resistant to the listed chemicals.

2 Resistant to the listed chemicals.

1 Not resistant to the listed chemicals.

~ Tendency between the two values.

For environments with chemicals not listed in the table, please consult our company. Values were obtained at +23°C under laboratory conditions after 7 days of curing.

Limitations

- Do not apply when the ambient and substrate temperatures are below +10°C or above +30°C.
- The ambient relative humidity must not exceed 80%, and the surface temperature must be at least 3°C above the dew point.
- On floors with rising damp, technical service must be consulted before application.
- 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.
- Avoid application in areas that are frozen, at risk of frost within 24 hours, or exposed to direct sunlight and wind.
- The primer must not be loaded or opened to foot/vehicle traffic before it has fully cured.
- If heating is required in the application area, use only electric warm-air blowers.
- Materials must be brought to the application area at least 24 hours before application so that they adapt to ambient conditions.

Cleaning of Tools

Tools and equipment used must be cleaned with COATIX® T 9100 Epoxy Thinner before the product hardens. Hardened and/or 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 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. Protect from frost.

Safety Precautions

Observe the safety signs and warnings on the packaging. Comply with the health and safety information given in the product's Safety Data Sheet (SDS). Ensure adequate ventilation during application; use protective equipment such as a mask, gloves and goggles. Avoid direct contact with the product and do not inhale vapours. Keep away from open flames. Food and drink must not be brought into application areas; store the product out of the reach of children.

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 21.25 kg + component B 3.75 kg = 25 kg set

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