

Product Data Sheet

CasTech Coat EP

Nov-2025, Ver. 01.01



Solvent-Free Epoxy Primer

DESCRIPTION

CasTech Coat EP is a two-component, solvent-free epoxy primer designed to penetrate and seal porous substrates such as concrete, cement screeds, and masonry. It improves the bond of subsequent CasTech flooring and coating systems.

The product may also be used as a general-purpose anti-corrosive primer for properly prepared concrete and steel surfaces.

TYPICAL USES

- Priming and sealing concrete, cement screeds, and masonry before epoxy or polyurethane systems
- General-purpose primer for concrete and steel surfaces
- Priming porous substrates before CasTech flooring and coating products
- Two-coat stand-alone sealing finish where specified

ADVANTAGES

Key advantages:

- Solvent-free, high-solids formulation
- Easy application by brush, roller, or squeegee
- Good penetration into porous substrates
- Excellent adhesion to concrete, wood, masonry, screed, and steel
- Supplied as a pre-proportioned two-component system

COMPATIBILITY

CasTech Coat EP is intended for properly prepared concrete, cementitious screeds, masonry, wood, and steel. It shall not be applied to asphalt floors or PVC tiles. Verify suitability before use on non-standard substrates.

TYPICAL PROPERTIES

Appearance	Liquid coating
System	Two-component solvent-free epoxy primer
Solid content	>98% by weight - ASTM D2369
Specific gravity at 25°C	1.10 ± 0.02 - ASTM D1475
Adhesion strength	>7.0 N/mm ² - ASTM D7234
Pot life at 25°C	>60 minutes - ASTM D2471
Touch dry at 25°C	4-6 hours
Tack-free at 25°C	8-10 hours
Overcoating time at 25°C	Minimum 12 hours; maximum 24 hours
Typical coverage	8-10 m ² /L/coat
Mixing ratio A:B	4:1 by weight
Application temperature	+5°C to +35°C
Shelf life	12 months
Number of components	Two
Kit size	20 L
Mixing ratio	4:1 by weight
Application method	Brush, roller or squeegee
Overcoating interval	12-24 hours at 25°C
Overcoating time	12-24 hours at 25°C

Typical values are subject to approximately 5-10% tolerance and may vary with test conditions, substrate, and application.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

General requirements

Remove grease, oil, dust, residual curing compound, mould-release agent, and any other contamination that may impair adhesion. Laitance should preferably be removed by light sweep blasting or hydro-jetting.

Grinding, grit blasting, or captive blasting is strongly recommended to obtain a sound, open-textured surface. Mechanical wire brushing may be suitable for small areas.

New concrete

New concrete and cementitious surfaces shall be at least 28 days old and have a moisture content not exceeding 5%.

Existing floors

Mechanically refurbish existing floors to expose a clean and sound substrate. Repair surface irregularities and blowholes

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with a suitable solvent-free epoxy repair mortar and allow it to harden. Remove all dust with an industrial vacuum before priming.

MIXING

Pour Component B (hardener) into Component A (resin). Mix carefully with a heavy-duty, slow-speed electric mixer fitted with a suitable paddle until a homogeneous mixture is obtained.

Mix complete kits wherever possible. Avoid excessive mixing to minimise air entrainment. Once mixed, use the material within its stated pot life.

Do not add solvent or any other material, and do not use product that has exceeded its pot life.

APPLICATION

Apply **CasTech Coat EP** in its undiluted state by brush, roller, or squeegee at a typical theoretical coverage of 8–10 m²/L per coat. Scrub the primer thoroughly into the prepared substrate to ensure continuous coverage.

Porous substrates

A second priming coat may be required where the substrate is particularly porous. Allow the first coat to reach the required condition before applying the additional coat.

Overcoating

Apply the subsequent flooring or coating system within 12–24 hours at 25°C. Re-prime when the primer has not been overcoated within 24 hours, after removing all dust and surface contamination.

Stand-alone finish

Where **CasTech Coat EP** is specified as a stand-alone sealing finish, apply a minimum of two coats.

CLEANING

Clean tools and equipment immediately after use with a suitable solvent. Hardened material can only be removed mechanically.

COVERAGE

Typical theoretical coverage is 8–10 m²/L per coat. Actual consumption will vary according to substrate porosity, surface profile, condition, and application method.

LIMITATIONS

- Do not apply at temperatures below +5°C or above +35°C.

- Do not apply where the work area may be exposed to immediate rain or moving water.
- Do not apply to asphalt floors or PVC tiles.
- New concrete or cementitious surfaces shall be at least 28 days old and have a moisture content not exceeding 5%.
- Use all mixed material within the stated pot life and discard expired material.
- Do not thin the product with any type of solvent under any circumstances.

STORAGE

Store **CasTech Coat EP** under cover in a cool, dry and shaded area, away from direct sunlight and protected from extreme temperatures. Keep containers tightly closed.

PACKAGING

CasTech Coat EP is supplied as a two-component 20 L kit comprising:

- Component A - Resin
- Component B - Hardener

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SHELF LIFE

12 months from the date of manufacture when stored unopened under the recommended conditions.

HEALTH AND SAFETY

Wear suitable protective clothing, safety goggles, and chemical-resistant gloves during mixing and application. Avoid contact with skin and eyes and maintain good ventilation.

If the product contacts the skin, wash immediately with soap

and plenty of clean water. In case of eye contact, rinse immediately with clean water and seek medical attention.

Refer to the latest Safety Data Sheet for detailed handling, first-aid, transport, and disposal information.

TECHNICAL SUPPORT

CasTech provides on-site assistance and consulting services on projects when requested. Technical data sheets on other CasTech products and guidance on their use are available on request.

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