

TECHNICAL DATA SHEET

CicoPrime[®]28

Two Component Solvent-Free Epoxy Primer for Polyurea & Polyurethane Systems

DESCRIPTION

CicoPrime[®] 28 is a two-component, solvent-free, amine-cured epoxy primer specially formulated for use as a bonding and sealing primer beneath CIC polyurea, polyurethane, epoxy, and other high-performance protective coating systems.

CicoPrime[®] 28 is designed for application over properly prepared concrete and steel substrates, particularly medium to low porous surfaces, where it acts as a penetrating sealer and bonding bridge for subsequent spray-applied coating systems.

The product offers medium viscosity, easy application, excellent adhesion, and reliable curing performance, making it suitable for waterproofing, containment, and protective coating applications including polyurea technology.

USES

CicoPrime[®]28 is ideal to be used in:

- Primer for concrete substrates before application of pure polyurea and polyurethane systems.
- Bonding bridge for spray-applied waterproofing and protective coating membranes.
- Sealing primer for medium to low porous concrete surfaces.
- Primer for concrete and steel substrates in protective coating applications.
- Primer for tank linings, wet areas, and industrial containment systems.

ADVANTAGES

- Provides excellent adhesion to concrete and steel substrates.
- Solvent-free and suitable for use in enclosed areas.
- Good penetration into properly prepared concrete surfaces..
- Helps reduce pinhole formation associated with porous substrates when properly applied.
- Easy to apply by brush or roller.
- Provides durable and water-resistant cured film.
- Can be used as a smooth primer or as a broadcast base coat depending on system requirements.

TECHNICAL PROPERTIES

Appearance	Turbid clear
Solid content, %	100
Density [ASTM D1475] kg/ltr @ 25°C	1.35±0.05
Flexural strength (ASTM C580)	36±2
Tensile Strength (ASTM D 638) N/mm ²	21±2
Adhesion to concrete (ASTM D4541) N/mm ²	>3.6 [concrete failure]
Pot life (ASTM D2471) min@ 25°C	60±5
Touch dry (ASTM D2471) hrs@25°C	12±30 min
Coverage m ² /kg @125 μ	≈6.0 (165 gr/ m ²)

PACKAGING

5, 15 & 20 Kg set

SHELF LIFE & STORAGE

12 months storage life if stored in its original unopened containers in shaded place [5- 35°C].

APPLICATION INSTRUCTIONS

Surface Preparation

CicoPrime[®]28 is applied on sound, clean, and dry substrates to achieve maximum adhesion between CicoPrime[®]28 and substrate.

The new concrete floors should be at least 28 days of age.

Laitance, oil, and grease could be removed by either using Cicosurface[®]Degreaser, sand blasting or by steam cleaning. All steel substrates should be free from dirt, oil and grease and blast cleaned to Sa 2½ according to EN ISO 12944, part 4, Concrete surfaces impregnated with oil and grease must be thoroughly cleaned with a 10% solution of water and soda or detergent soap and then rinsed several times with plenty of clean water. Remove any water from the surface and wait until the level of residual moisture is no higher than 4% before applying.

Mixing

Thoroughly stir the base component (A) alone to achieve a uniform consistency. Then, pour the entire contents of the hardener component (B) (smaller container) into the base container. Mix the combined components using a low-shear mechanical mixer (e.g., a jiffy-type or spiral paddle) mounted on a slow-speed electric drill (300–500 RPM).

Continue mixing for at least one minute, or until a smooth, homogeneous mixture is obtained. Ensure the mixing action is steady and consistent and avoid entraining air into the mixture

APPLICATION

Apply CicoPrime[®]28 by brush or roller, ensuring that the substrate is completely covered. In the case of very porous concrete substrates, further coats of primer may be required. It's recommended to finish all concrete repairs in prior to applying CicoPrime[®]28 like crack filling or bore smoothing, but all surfaces should be dry as well i.e., it's preferable to use epoxy repair pastes for repair to save time. CicoPrime[®]28 could be used as well as an anti-slip base coat by broadcasting Cicogrip[®]1,2 or 3 as per the desired roughness degree, then other flooring topcoat could be used for the other layers.

Make sure there are no open pores in the surface of the substrate, otherwise air bubbles could escape from the substrate and form pinholes in the coating system to be applied. This is particularly important when applying self-levelling resin or cementitious systems. In some applications like epoxy screeds, primer should be tacky during screed application, but for all other coating systems, it should be dry before any overcoat is achieved.

CicoShiled (Polyurea) System Note:

For CicoShiled polyurea applications, it is essential to ensure that the primer is fully cured or within the approved recoat window prior to spraying. Improper surface preparation or incomplete sealing of substrate pores may lead to pinholes or defects in the CicoShiled polyurea membrane.

Warranty

CIC products are guaranteed against defective materials and manufacture and sold subject to **CIC's** standard terms and conditions of sale. Whilst **CIC** endeavors to ensure that any advice, information or recommendation given is correct, the company cannot accept any liability either directly or indirectly arising from the use of its products. User of the product must test the product's suitability for the intended application and purpose, since the company has no control over the application of its products. Information contained in this document is given on the best current knowledge. Our Products are in continuous development and CIC reserves the right to change the product without prior notice.

APPLICATION LIMITATION

- Do not apply on substrates affected by rising damp, especially if they will be coated with an epoxy or polyurethane system.
- Do not dilute the product with solvent or water.
- Do not apply on dusty, crumbling, or structurally weak surfaces.
- Do not apply substrates contaminated with oil, grease, or any type of stain.
- After application, protect the product from water for at least 24 hours.
- Do not apply the product directly on substrates that:
 - Have a moisture content above 4% or exhibit capillary rising damp (check using a polyethylene sheet test).
 - Have a temperature less than 3°C above the dew-point temperature, to avoid condensation.

CLEANING

Clean all tools and application equipment with Cicosolvent[®] immediately after use. Hardened and/or cured material can only be removed mechanically, or by hand tools.

PRECAUTIONS

Health and Safety

All safety stuff should be worn during application like safety goggles and rubber gloves, to avoid any harmful accidents.

If CicoPrime[®]28 is splashed accidentally to the skin, it must be washed off with water and soap at once. If it was splashed to the eyes or nose, they must be rinsed with plenty amount of clean warm water and seek medical attention immediately.

TECHNICAL SUPPORT

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