



Coat AC 31

High Performance Solvent Based Anti Carbonation Protective / Decorative Coating

Pack Size
20Kgs

TDS
Technical Data Sheet



Product Description

Coat AC 31 is a high-performance, one-component acrylic ester protective coating formulated for superior protection and aesthetic enhancement of various surfaces. It offers excellent UV resistance, superior carbonation protection, and long-term durability. This environmentally friendly, water-based formulation is designed to safeguard concrete, masonry, and steel from aggressive atmospheric conditions.

Uses

Coat AC 31 is suitable for a wide range of applications, including:

- External and internal protective coatings for concrete and masonry
- Anti-carbonation coatings for car parks • Protective coatings for bridge structures, sea walls, and coastal environments

Key Features and Benefits

- **Cost-Effective:** Low maintenance and long service life due to excellent UV and chemical resistance.
- **Superior Carbonation Protection:** Reduces carbonation impact and extends the lifespan of structures.
- **UV Stable:** Does not fade or deteriorate under prolonged exposure to sunlight.
- **Long-Lasting Performance:** Resistant to chloride and sulfate ion ingress, as well as various chemicals.
- **Environmentally Friendly:** Water-based and solvent-free, making it suitable for enclosed spaces.

Technical Specifications

- **Specific Gravity:** 1.3
- **Solids by Volume:** 45%
- **Drying Time (Touch Dry):**
 - @ 20°C: 1 hour
 - @ 35°C: 0.5 hours
- **Recoat Time:**
 - @ 20°C: 7 hours
 - @ 35°C: 4 hours
- **Full Cure Time:**
 - @ 20°C: 7 days
 - @ 35°C: 5 days
- **Carbon Dioxide Diffusion Resistance:**
 - Equivalent thickness of air: 312 meters
 - Equivalent thickness of 30N concrete: 780 mm
- **Salt Fog Spray Resistance:** 5000 hours (ASTM B117) – No change

• Chemical Resistance (ASTM D1308):**Acids (m/v)**

- Acetic Acid (20%): Excellent
- Lactic Acid (20%): Excellent
- Nitric Acid (5%): Excellent
- Oleic Acid (1%): Good

Aqueous Solutions

- Magnesium Sulphate (25%): Excellent
- Tap Water, Sea Water, Ground Water, High Sulphate Water, Distilled Water: Excellent

Application Instructions**Surface Preparation**

- Ensure all surfaces are clean, dry, and free from dust, oils, grease, and any contaminants that may hinder adhesion.
- Concrete Surfaces: Remove laitance, loose materials, and contaminants using grinding, grit blasting, or water jetting. Fill surface irregularities with appropriate repair mortar.
- Metal Surfaces: Blast to a bright finish, achieving Swedish Standard SA 2½ or equivalent.
- Epoxy Coatings: Contact Carbolink Technical Support for surface preparation recommendations.

Priming

- Metal and Wood: No priming required.
- Low-Porosity Concrete: Pre-soak with potable water and ensure a saturated surface-dry (SSD) condition. If porous, apply Coat AC 31 Primer Sealer diluted 1:10 with water. A second coat may be required for highly porous surfaces.
- Friable/Very Porous Substrates: Use Coat AC 31 Primer WB or Coat AC 31 Primer AC to stabilize the substrate.

Mixing

- Stir thoroughly before application to ensure uniform consistency.

Application Method

- Hand Application: Apply using a brush or roller in two coats, ensuring a uniform thickness of 200 microns per coat. Allow the first coat to cure before applying the second, ensuring it is within 24 hours.
- Spray Application: Use airless spray equipment for faster and more uniform application. Contact Carbolink Technical Support for advice on spray parameters.

Cleaning

- Clean tools and equipment immediately after use with Carbolink Solvent 102.

Repairing and Overcoating

- Damaged areas can be easily overcoated after light abrasion with a wire brush to ensure good mechanical bonding between layers.

Packaging and Coverage**• Packaging:**

Coat AC 31: 20-liter pails
Coat AC 31 Primer AC: 20- and 200-liter pails
Coat AC 31 Primer WB: 20-liter pails
Coat AC 31 Primer Sealer: 4-liter pails

• Coverage (varies based on substrate condition and porosity):

Coat AC 31: 5 m²/liter at 200-micron wet film thickness (2-coat application recommended)
Coat AC 31 Primer AC: 8–10 m²/liter
Coat AC 31 Primer WB: 8–10 m²/liter
Coat AC 31 Primer Sealer: 50 m²/liter (diluted 1:10)

Limitations

- Minimum application temperature: 10°C
- Do not apply under high humidity conditions or during rainfall.
- Protect freshly applied coating from rain and direct water exposure until fully cured.

Technical Support

Carbolink provides comprehensive technical support to specifiers, end-users, and contractors, including on-site assistance, AutoCAD detailing, and dedicated specification support.

Pack Size

20Kgs



Data Reliability

All technical data provided in this document are based on laboratory tests. Actual performance may vary due to factors beyond our control.

Regional Compliance

Product specifications may vary based on local regulations. Please refer to the local Product Data Sheet for precise information.

Legal Disclaimer

The information and recommendations regarding the application and end-use of Carbolink products are provided in good faith based on our current knowledge and experience. Due to variations in materials, substrates, and actual site conditions, no warranty of merchantability or fitness for a specific purpose can be inferred. The user must determine the product's suitability for the intended application. Carbolink reserves the right to change the properties of its products. All proprietary rights of third parties must be observed. Orders are subject to our current terms of sale and delivery. Always refer to the most recent local Product Data Sheet, available upon request.