OMNITEK® Paint EC

Anti-carbonatation & surface protection paint

Product Description

OMNITEK® Paint EC is an advanced water based acrylic paint, specifically designed for long term anti-carbonatation and surface protection according to EN 1504-2.

Advantages

- High carbonatation resistant and weather resistant elastic coating for long term protection of concrete, masonry and cement rendered surfaces.
- One component solution with fast, easy and cost effective application by roller, brush or spraying.
- Environmentally friendly, water based and solvent free coating.
- CE certified according to EN 1504-2, ingress protection.

Certification

CE certified according to EN 1504-2, principle 1.3 ingress protection.

Field of Application

OMNITEK® Paint EC is used for:

- Surface ingress protection of concrete according to EN 1504-2.
- Long term weather resistance and anti-carbonatation for concrete, masonry and cement rendered surfaces.

<table>
<thead>
<tr>
<th>Properties</th>
<th>Unit</th>
<th>Value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>[kg/dm³]</td>
<td>≈ 1.40</td>
</tr>
<tr>
<td>Application thickness per layer</td>
<td>[mm]</td>
<td>1</td>
</tr>
<tr>
<td>Application temperature</td>
<td>[°C]</td>
<td>+5 to +35</td>
</tr>
</tbody>
</table>

| Consumption(**)             | [kg/m²] | ≈ 0.20   |
| - First coat                |        |          |
| - Second coat               |        | ≈ 0.13   |

| Recoat time(***), [hours]   |        | >12      |

| Adhesion to concrete        | [MPa]  | >2       |
C02 permeability - Diffusion equivalent air layer thickness Sd

- [m] 85

Water vapor permeability - Diffusion equivalent air layer thickness Sd

- [m] 0.5

Water absorption

- [kg/m².h⁰.⁵] 0.02

Shelf Life

12 Months Stored under cover, clear of the ground, protected from all sources of moisture and frost.

Packaging

Metal pails of 21 kg. 36 pails per pallet (756kg)

Appearance

RAL 7032 and other colors available on request. (minimum quantity required)

(*) Typical values in production control. All tests were executed under a conditioned temperature of 21°C and 65% RH.

(**) Consumption needs to be estimated by the designer, since it depends on the surface roughness and porosity.

(***) Recoating time depends on ambient conditions and should be applied when the first layer is sufficiently cured.

Application

1. Preparation of Substrate

- Substrate preparation has to be according EN 1504-10 part 7.
- The substrate has to be free from dirt, grease, laitance, loose concrete, loose particles or layers which could adversely affect adhesion.
- Remove all damaged concrete and prepare substrate by sand or grid blasting, high pressure water jetting, or other methods until base concrete is exposed, offering sufficient roughness (bond) and open pores.
- The substrate must be frost-free and have a cohesion of minimum 1.5 N/mm². • Exposed or corroded reinforcement steel needs to be treated with OMNITEK® CPC. • Damaged areas need to be repaired with a suitable OMNITEK® or BETEC® cement based repair mortar.
- Concrete surfaces should be cured for a minimum of 7 days.
- The substrate surface must be dry before application of OMNITEK® Paint EC to assure sufficient adhesion capacity.

2. Mixing

- OMNITEK® Paint EC is ready to use. It is recommended to homogenize the material before use.
3. Application

- The material is applied in minimum 2 layers of 1mm by using a brush or roller. Alternatively suitable spray equipment can be used.
- Apply the first layer on the dry substrate and allow curing for minimum 12 hours depending on ambient temperature.
- Apply the second layer after the first coat has sufficiently cured.
- For a uniform appearance it is advised to finish the second layer in the same direction as the first layer.
- Do not apply OMNITEK® Paint EC when the temperature is below 5°C, or expected to fall below 5°C in the next 24h.

4. Curing

- After treatment has to be according EN 13610 in combination with DIN EN 1045-3.
- In warm or windy conditions protect the applied material from dehydration by mist-spraying with clean water or protective tarpaulins until the initial set has taken place.
- In cold conditions cover with insulated tarpaulin, polystyrene or other insulating material. Protect surfaces against frost and rain until final set has taken place.
- In cold, humid or unventilated areas it can be necessary to allow for a longer curing period, or to introduce forced air movement to avoid condensation. Never use dehumidifiers during the curing period or within 28 days after application.
- Allow the applied material to cure for approximately

5. Cleaning and maintenance

- Mixing and application equipment should be cleaned immediately with clean water. Hardened material needs to be removed mechanically.

6. Special remarks

- Low temperatures delay the curing of the material. High temperatures accelerate the curing and decrease the open time of the material.

Health & Safety

OMNITEK® Paint EC is not classified. However it is strongly advised to wear gloves and to protect skin and eyes during use. Treat splashes to eyes and skin immediately with clean water. Consult a doctor when irritation continues. If accidentally ingested, drink water and consult a doctor. Users must comply with all risk and safety phrases. MSDS’s can be obtained from GCP Applied Technologies or from our website.
We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate, and is offered for consideration, investigation and verification by the user, but we do not warrant the results to be obtained. Please read all statements, recommendations, and suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation, or suggestion is intended for any use that would infringe any patent, copyright, or other third party right.

BETEC and OMNITEK are trademarks, which may be registered in the United States and/or other countries, of GCP Applied Technologies Inc. This trademark list has been compiled using available published information as of the publication date and may not accurately reflect current trademark ownership or status.

© Copyright 2018 GCP Applied Technologies Inc. All rights reserved.

GCP Applied Technologies Inc., 62 Whittemore Avenue, Cambridge, MA 02140 USA.

In UK, GCP Applied Technologies, 580-581, Ipswich Road, Slough, Berkshire, SL 1 4EQ, EQ. This document is only current as of the last updated date stated below and is valid only for use in the United States. It is important that you always refer to the currently available information at the URL below to provide the most current product information at the time of use. Additional literature such as Contractor Manuals, Technical Bulletins, Detail Drawings and detailing recommendations and other relevant documents are also available on www.gcpat.com. Information found on other websites must not be relied upon, as they may not be up-to-date or applicable to the conditions in your location and we do not accept any responsibility for their content. If there are any conflicts or if you need more information, please contact GCP Customer Service.

Last Updated: 2018-08-24

gcp.com/solutions/products/omnitek-paint-ec