

OPTEC® EC 680

Superplasticizer for Concrete acc. to EN 934-2:T3.1/3.2

Product Description

Combination admixture for production of semi-dry elements with high-quality surfaces and reduced efflorescence OPTEC®EC-680 is used for enhancing all high-quality concrete elements that require efflorescence reduced surfaces and intense colors. Most important examples for application include the production of slabs, interlocking pavement, kerbstones, palisades, masonry elements, etc.

Mode of Action

The water-reducing and compaction aiding components in OPTEC®EC-680 enable the production of higher density, and higher strength elements. The efflorescence reducing substances of OPTEC®EC-680 make the walls of capillary pores water-repellent and reduce the capillary suction effect. The transport of dissolved calcium hydroxide to the surface is impaired and thereby the tendency to effloresce is significantly reduced. Surface-active substances create a better dispersion of the cement particles, making the concrete more homogeneous and easier to compact. Superficial slurries that are generated during vibration effect closed textured surfaces. Moisture is reduced in the capillaries. A better dispersion of colour pigments allows a more intense and even dyeing of the concrete.

Dosing and Special Information

OPTEC®EC-680 is added to the gauging water or the ready mix. The concrete should be run as moist as possible in order to increase the effect of OPTEC®EC-680.

Preliminary tests according to official national standards are always required before use!

Technical Data

Form	fluid
Colour	brown
Density	1.06 ± 0.02 g/cm ³
pH-value	11.0 ± 1.0
Storage	Keep original containers closed, protect from excessive heat and frost.
Recommended Dosage	0.20–1.06 m% by cement mass
Physiological effect	May irritate skin and eyes; see SDS.
Shelf life	approx. 1 year in closed original containers



gcpat.ae | United Arab Emirates customer service: +971 4 5139560

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.

OPTEC is a trademark, 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., 2325 Lakeview Parkway, Alpharetta, GA 30009, USA

P. O. Box 5006, Office 2104, 21 Floor, The Exchange Tower, Opp. JW Marriott Marquis Hotel, Business Bay, Dubai – United Arab Emirates

This document is only current as of the last updated date stated below and is valid only for use in the UAE. 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.ae. 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: 2022-11-18