

OPTEC® EC-865

Efflorescence-control admixture for masonry

Product Description

OPTEC®EC-865 is a ready-to-use, liquid, integral water-repellent admixture, specially formulated for use in low slump concrete masonry mixes. OPTEC® EC-865 can assist in production of water-repellent masonry units while reducing the potential for efflorescence to occur. OPTEC® EC-865 maintains colour intensity, and is especially suitable for the production of manufactured concrete products such as block, segmental retaining units and pavers.

Applications

As an integral-based water-repellent admixture treatment designed for use in manufactured concretes, OPTEC® EC-865 combines with cement to form a chemical reaction during cement hydration to fill the pores of the concrete with a water-insoluble solution. This produces a water-repelling effect which greatly reduces the absorption of the capillary pores, while making the concrete unit hydrophobic.

Since the admixture is uniformly dispersed throughout the masonry unit, the migration of water from within is also restricted. This aids in reducing the potential for efflorescence.

OPTEC® EC-865 increases the strength of concrete units at the same cement content. With increased workability, mixes containing OPTEC® EC-865 have better mix compaction with less potential for cracking. Better compaction also provides sharper edges, resulting in fewer rejected units. The finish of the concrete unit will be smoother with denser surface and improved finished texture.

Storage

OPTEC® EC-865 should be protected from direct sunlight and freezing. OPTEC® EC-865 will freeze at 0°C and cannot be remixed after freezing. Product shelf life is 8 months stored in ideal conditions.

Packaging

OPTEC® EC-865 is available in 1,000L returnable bulk totes or 15L pails.

Health and Safety

All precautions for OPTEC® EC-865 are defined on the Material Safety Data Sheet (MSDS) and must be followed at all times.



Product Advantages

- Reduced potential for secondary efflorescence
- Lower water absorption to keep walls dry
- Improved colour intensity and retention
- Higher strengths
- Improved surface texture
- Sharper and more defined edges

Addition Rates

OPTEC® EC-865 is supplied ready-to-use to allow for easy handling and controlled dispersion into the mix. Depending on the desired performance, the addition rate range is between 800 and 1200mL/ 1,000kg of dry mix materials, including cement, supplementary cementitious materials and aggregates. Generally, an addition level of 1,000mL/ 1,000kg of total dry mix is used in most applications. Due to cement, aggregate type and content, and type of mixing equipment, addition rate levels can vary. Please refer to your local GCP representative for detailed requirements.

Mixing Operations

OPTEC® EC-865 should be added with the mixing water and thoroughly blended into the concrete mix and should never be added directly to dry materials.

Compatibility with Other Admixtures

OPTEC® EC-865 is compatible with most admixtures. Admixtures in the GCP Masonry range such as Accelerators (DARACCEL®37M or QUANTEC®NC-544) and Plasticisers (QUANTEC®) can be used for improved performance. Each admixture should be added separately to the mix.

Dispensing Equipment

Please contact your local GCP representative for further information regarding the dispensing equipment for this product.

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