

DAREX[®] AE5G

Air-entrainer

Product Description

DAREX[®]AE5G is a liquid air-entraining agent for use in all types of mortar and concrete mixes. It is particularly designed for use in the production of foamed concrete and for use with synthetic and naturally occurring lightweight aggregates, where the density of fine aggregate/cement paste is normally required to be similar to that of the aggregates.

DAREX[®]AE5G is formulated from carefully selected raw material and is manufactured under controlled conditions to give a consistent product. It is a blend of anionic surfactants. DAREX[®]AE5G is a pale, straw coloured liquid intended for use as supplied. DAREX[®]AE5G does not contain chlorides as an intentional component and it is non-corrosive. DAREX[®]AE5G meets the specification requirements of chemical admixtures under ASTM C260.

One litre weighs approximately 1.03kg ± 0.02kg.

Product Advantages

- DAREX[®] AE5G will entrain air into types of concrete, even those with highly angular crushed aggregates.
- It can be used with all types of lightweight aggregates to produce very low-density concrete mixes.
- DAREX[®] AE5G can be employed to entrain air in mixes containing high proportions of pulverised fuel ash.
- An aqueous solution of DAREX[®] AE5G can be performed to give a very stable foamed concrete.

Applications

DAREX[®]AE5G may be used whenever the purposeful entrainment of air is required by concrete specifications. It is particularly useful in mass concrete and in high-cement, low-slump paving mixes, which require efficient, effective air-entraining admixtures. DAREX[®]AE5G should be added to concrete mixes or mortar mixes during the mixing process at the same time as the water or the aggregates. It should not be added directly to the cement or mortar.

Effects of Overdosing

As with all air-entraining agents, DAREX[®]AE5G in any given mix will proportionately reduce compressive strengths as the level of entrained air is increased. Overdosing DAREX[®]AE5G will normally produce an increase in air content and workability, together with a loss in ultimate compressive strengths.

Compatibility with Other Admixtures

DAREX[®]AE5G is compatible in concrete with all known accelerating admixtures, water-reducing admixtures and water-reducing retarders. Each admixture should be added separately to the mix, and not premixed with other admixtures.

Addition Rates

The performance of DAREX®AE5G is best assessed after preliminary tests on site using the actual mix and the plant under consideration to determine the optimum dosage rates which will give the desired concrete properties.

For foamed concrete/mortar, a 5–7% solution of DAREX®AE5G is usually added via a foam tube. The quantity of DAREX®AE5G added will determine the resultant density of the concrete/mortar produced.

Hence the volume of aqueous solution added is proportional to the concrete/mortar density required. Conventional mixing equipment can be used to produce foamed lightweight aggregate concrete.

As a guide to trials, an addition rate of 200mL of DAREX®AE5G per 50kg cement should be evaluated.

The air content of concrete should be regularly checked, and because of the absorptive nature of most lightweight aggregates, a gravimetric determination is most suitable.

Dispensing Equipment

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

Packaging

DAREX®AE5G is available in bulk, in 205L drums and in 1,000L totes. DAREX®AE5G contains no flammable ingredients. DAREX®AE5G should preferably be stored in sealed conventional containers protected from the elements.

Health and Safety

See DAREX®AE5G Material Safety Data Sheet or consult GCP Applied Technologies.

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.

DAREX is a 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., 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

gcpat.ae/solutions/products/darex-ae5g