

DARACEM® 100E

Superplasticiser

Product Description

DARACEM®100E is an aqueous solution of chemical dispersants combined with other chemicals which increase its beneficial effects on the quality and plasticity of a concrete mix. Daracem 100E is a high range water reducer specially designed for extended slump life, extends the time span of the slump up to twice as long or longer than conventional superplasticisers does with only 25 minutes to 45 minutes time span of a slump before the concrete begins to lose its workability. It is an aqueous solution of a modified naphthalene sulfonate. It is a low viscosity liquid which has been formulated for use as received.

Daracem 100E contains no added chloride. Daracem 100E is formulated to comply with the following chemical admixture specifications for concrete: ASTM C494 Type F and Type G; BS 5075: Part 3: 1985; SS 320:1987; AS 1478 and AS 1479 Re and WRRe.

One litre of Daracem 100E weighs approximately $1.19 \text{kg} \pm 0.02 \text{kg}$.

Dispersion

Daracem 100E is a superior dispersing admixture having a marked capacity to disperse the cement agglomerates normally found in a cement-water suspension. The capability of Daracem 100E, in this respect, exceeds that of normal water reducing admixtures.

Product Advantages

- Produce high slump with improved slump retention flowable concrete at no loss in strength.
- Reduce energy requirement for precast/prestress work.
- Good placeability into forms and around reinforcing steel.
- Early achievement of form stripping strengths.

Applications

Daracem 100E produces concrete with extremely workable characteristics referred to as high slump, flowing concrete. Daracem 100E is ideal for low water-cement ratio concrete designed for high early compressive and flexural strengths with exceptional workability and flow characteristics.

Daracem 100E is ideal for use in prestress, precast, bridge deck or any concrete where it is desired to keep the water-cement ratio to a minimum and still achieve the degree of workability necessary to provide easy placement and consolidation.



Compatibility with Other Admixtures

In concrete containing Daracem 100E, the use of an air-entraining agent (such as DARAVAIR® or DAREX®AEA®) is recommended to provide suitable air void parameters for resistance against freeze-thaw attack. Most water reducers or water-reducing retarders are compatible with Daracem 100E as long as they are separately added to the concrete. Pretesting of the concrete should be performed to optimise dosages and addition times of these admixtures.

Caution should be exercised when using Daracem 100E together with a retarder, as excessive retardation can occur if the admixture dosages are too high.

Dispensing Equipment

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



Addition Rates

Addition rates of Daracem 100E can vary with type of application, but will normally range from 400 to 1,500mL / 100kg of cementitious material. At a given water-cement ratio, the slump required for various placement needs can be controlled by varying the addition rate. Should job site conditions require using more than recommended addition rates, please consult your local GCP representative.

Packaging

Daracem 100E is available in bulk, and in 205L drums. Daracem 100E contains no flammable ingredients. It will begin to freeze at approximately 0°C, but will return to full strength after thawing and agitation. In storage and for proper dispensing, Daracem 100E should be maintained at temperatures above 4°C.

Health and Safety

See Daracem 100E Material Safety Data Sheet or consult GCP Applied Technologies.



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