

DARACEM[®] ME1

Concrete Plasticiser / Superplasticiser

Product Description

DARACEM[®]ME1 is a melamine formaldehyde resin which when introduced into concrete will produce high workability concrete which is virtually self-levelling and requires little or no vibration during handling and placing. In addition, it can be used to effect large water reductions in concrete of normal workability to achieve higher early and subsequent strengths.

DARACEM ME1

DARACEM ME1 Form	liquid 20% solution
Appearance	colourless to pale straw liquid
Specific Gravity	1.11 at 20 °C
Air Entrainment	Nil
Chloride Content	Nil
Freezing Point	-1 °C

Advantages

- Substantial increases in workability can be obtained by a direct addition of DARACEM ME1 to a mix having a slump in the range 50–100 mm. The magnitude of this increase is often such that the concrete becomes self levelling and minimal vibration is required to achieve a dense and void free concrete.
- High strength mixes can be produced at normal workabilities and cement contents but at reduced w/c ratios. The result concrete is of a dense and impermeable nature.
- DARACEM ME1 is completely non-retarding and hence concrete setting and formwork stripping times are unaffected.

Method of Use

DARACEM ME1 Powder is a white crystalline material which must be dissolved in fresh potable water to make up a 20% solution (1 part DARACEM ME1:4 parts water) before use.

Compatibility with Cements

DARACEM ME1 can be used with all types of Portland, Pozzolanic and Blast Furnace cements. It can also be used with fly ash and silica fume.

Compatibility with other Admixtures

DARACEM ME1 should not be premixed under any circumstances with other admixtures. While some admixtures can be usefully combined within the same mix the performance of this product may well be affected by the presence of other chemicals and we recommend that GCP Applied Technologies be contacted for advice in all such circumstances.

Addition Rates

Range: 1.0%–2.0% volume by weight of cement

The performance of DARACEM ME1 is best assessed after preliminary trials on site using the actual mix constituents under consideration to determine the optimum dosage and effect on concrete properties, such as early age and ultimate compressive strengths, workability retention, set retardation and shrinkage, when these are of consequence

As a guide to these trials, when used in liquid form, an addition rate of 1000 ml–2000 ml DARACEM ME1 per 100 kg cement is recommended. For advice and assistance with our trials we would recommend that you consult our Technical Department.

Effects of Overdosing

An overdose of the recommended amount of DARACEM ME1 can result in slight set retardation. The ultimate strength and properties of the concrete however will not be impaired, providing the concrete is cured properly

Dispensing

It is preferable that liquid admixtures for concrete should be introduced into a mixer by means of automatic dispensing equipment, details of which are available upon request.

Health and Safety

For further information see the DARACEM®ME1 SDS (Safety Data Sheet) or consult GCP.

Packaging

DARACEM ME1 powder is supplied in polythene-lined paper sacks. Net weight 30 kg. Other packaging by special agreement.

DARACEM ME1 Liquid is supplied in 210 litre free, nonreturnable drums.

Alternatively, 1000 litre IBCs or bulk deliveries can be arranged.

Storage

DARACEM ME1 Powder is hygroscopic and an unopened bag can be stored several years under dry conditions. A partly used bag should be tightly closed and used within a short period of time.

DARACEM ME1 should be stored in original containers or suitable closed tanks, preferably out of direct sunlight and protected from extremes of temperature, where its storage life is at least one year.

If the product does become frozen it should be carefully mixed after thawing out to restore it to its normal state.

Storage Life in Manufacturer's Drums:

12 months from the date of manufacture

Storage Life in Bulk Storage:

12 months from the date of delivery

Technical Service

The Technical Service Department of GCP is available to assist you in the correct and best use of our products. These resources and advice are at your disposal entirely without obligation. Please contact

GCP

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Last Updated: 2025-05-15

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