Super 39

Superplasticiser

Product Description

Super 39 is a ready-to-use aqueous solution of a modified naphthalene sulfonate and selected highly purified organic compounds.
Super 39 is a high range water reducer, commonly referred to as a superplasticiser. It is a low viscosity liquid which has been formulated by the manufacturer for use as received. Super 39 contains no added chloride. Super 39 is formulated to comply with the following chemical admixtures specifications for concrete: BS 5075: Part 3: 1985.
One litre of Super 39 weighs approximately 1.20kg ± 0.02kg.

Dispersion

Super 39 is a superior dispersing admixture having a marked capacity to disperse the cement agglomerates normally found in a cement-water suspension. The capability of Super 39, in this respect, exceeds that of normal water-reducing admixtures.

Product Advantages

- Super 39 can produce high slump flowable concrete at no loss in strength.
- Super 39 can produce low water-cement ratio concrete and therefore, high strengths.
- Super 39, in prestress/precast work, can be used to substantially reduce or eliminate the high energy requirements of external heat for accelerated curing.
- Super 39 concrete produced with Type I cement may be substituted for normal concrete produced with Type III cement to achieve early release strengths.
- Super 39 concrete, even at high slump, exhibits no significant segregation in comparison to concrete without a superplasticiser at the same slump.
- Super 39 aids in rapid discharge of concrete from truck mixers thereby reducing on-the-job time and improving mixer utilisation.

Addition Rates

Addition rates of Super 39 can vary with type of application, but will normally range from 400 to 1,500mL / 100kg of cementitious material. In most instances the addition of 400 to 1,100mL / 100kg of cementitious material will be sufficient. At a given water-cement ratio, the slump required for placement 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.

Compatibility with Other Admixtures

Super 39, 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 Super 39 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 Super 39 together with a retarder, as excessive retardation can occur if the admixture dosages are too high. The admixtures should not be in contact with each other before they enter the concrete.

Applications

Super 39 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. Super 39 will also fluidise concrete making it ideal for tremie concreting or other applications where high slumps are desired.

Dispensing Equipment

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

Packaging and Storage

Super 39 is available in bulk and in 205L drums.
Super 39 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, Super 39 should be maintained at temperatures above 0°C.

Health and Safety

See Super 39 Material Safety Data Sheet or consult GCP Applied Technologies.

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gcpat.com.au/solutions/products/super-39