

WRDA[®] 35

Water-reducing admixture ASTM C494 Type A and D

Product Description

WRDA[®]35 is an aqueous solution of complex organic compounds containing a catalyst which promotes more complete hydration of Portland cement. It does not contain calcium chloride. WRDA 35 is manufactured under rigid control which provides uniform, predictable performance. It is supplied as a dark brown, low viscosity liquid, ready-to-use as received. One gallon weighs approximately 10.0 lbs (1.2 kg/L).

Uses

WRDA[®]35 produces a concrete with lower water content, greater plasticity and higher strength which is less permeable and more durable. It is used in ready-mix plants, job site plants and concrete pavers for normal weight and light weight concrete, in block, precast and prestressed concrete plants.

Performance

WRDA 35 is a chemical admixture meeting the requirements of *Specification for Chemical Admixtures for Concrete*, ASTM Designation C494 as a Type A and as a Type D admixture.

As a dispersing agent, WRDA 35 lessens the natural interparticle attraction between cement grains in water. It does this by colloidal action by adsorption on the cement particles thus reducing their tendency to clump together and makes the mix more workable with less water. As a cement catalyst, WRDA 35 affects a more complete hydration of the cement beginning immediately after the cement and water come together. This occurs at the lower additions of WRDA 35 or immediately after a period of designed and controlled hydration at the higher additions. WRDA 35 increases the gel content of the concrete, the paste or binder that “glues” the concrete aggregates together. The increased gel content adds to the water retention and internal cohesiveness of the mix, reducing bleeding and segregation as it increases workability and placeability.

Product Advantages

- Consistent water reduction and set times
- Improves performance concrete containing supplementary cementitious materials
- Produces concrete that is more workable, easy to place and finish
- High compressive and flexural strengths

Addition Rates

The amount of WRDA 35 to be used will range from 2 to 8 fl oz/ 100 lbs (130 to 520 mL/100 kg) of cement depending upon job requirements. ASTM C494 Type A performance is typically achieved when dosed from 2 to 5 fl oz/100 lbs (130 to 325 mL/100 kg) of cement and ASTM C494 Type D performance is typically achieved when dosed from 5 to 8 fl oz/100 lbs (325 to 520 mL/100 kg) of cement.

Compatibility with Other Admixtures and Batch Sequencing

WRDA 35 is compatible with most GCP admixtures as long as they are added separately to the concrete mix, usually through the water holding tank discharge line. In general, it is recommended that WRDA 35 be added to the concrete mix near the end of the batch sequence for optimum performance. Different sequencing may be used if local testing shows better performance. Please see GCP Technical Bulletin TB-0110, *Admixture Dispenser Discharge Line Location and Sequencing for Concrete Batching Operations* for further recommendations.



Pretesting of the concrete mix should be performed before use, as conditions and materials change in order to assure compatibility, and to optimize dosage rates, addition times in the batch sequencing and concrete performance. For concrete that requires air entrainment, the use of an ASTM C260 air-entraining agent (such as Daravair® or Darex® product lines) is recommended to provide suitable air void parameters for freeze-thaw resistance. Please consult your GCP Applied Technologies representative for guidance.

Packaging & Handling

WRDA 35 is available in bulk, delivered by metered tank trucks, in totes and drums.

WRDA 35 will freeze at about 28 °F (-2 °C) but will return to full strength after thawing and thorough agitation.

Dispensing Equipment

A complete line of accurate, automatic dispensing equipment is available. WRDA 35 may be added to the concrete mix on the sand or in the water.

Specifications

Concrete shall be designed in accordance with *Standard Recommended Practice for Selecting Proportions for Concrete*, ACI 211.

The water-reducing admixture shall be WRDA 35 as manufactured by GCP Construction Products, or equal. The admixture shall not contain calcium chloride. It shall meet the requirements of *Specification for Chemical Admixtures for Concrete* ASTM Designation C494 as a Type A admixture or as a Type D admixture. Certification of compliance shall be made available on request. The admixture shall be considered part of the total mixing water.

The admixture shall be delivered as a ready-to-use liquid product and shall require no mixing at the batching plant or job site.

gcpat.it | Servizio clienti in Italia:: +39 02 93537291

Confidiamo che le informazioni date con la presente siano utili. Sono basate su dati e conoscenze che riteniamo vere ed accurate e sono messe a disposizione dell'utente perché li consideri, facendo le opportune verifiche. Tali informazioni non rientrano nei nostri obblighi quali fornitori e per esse nessun compenso, esplicito o implicito, viene richiesto e/o viene dato. Anche per questo non assumiamo alcuna responsabilità per l'uso di tali informazioni e per i risultati che possono essere ottenuti. Nessuna informazione, raccomandazione o suggerimento può essere intesa ad un impiego in un processo che violi qualsiasi brevetto, copyright o diritto di terzi.

WRDA sono marchi registrati della GCP Applied Technologies Inc in USA o in altri stati. Questa lista di marchi registrati è stata composta usando le informazioni disponibili alla data di pubblicazione e potrebbero non riflettere accuratamente la proprietà o lo status di essi.

© Copyright 2017 GCP Applied Technologies Inc. Tutti i diritti riservati.

GCP Applied Technologies Inc., 2325 Lakeview Parkway, Alpharetta, GA 30009, USA

GCP Italiana S.p.A. - Via Trento, 7 - 20017 Passirana di Rho, Milano, Italy

Questo documento è aggiornato solo a partire dalla data dell'ultimo indicato di seguito ed è valido solo per l'uso in Italia. È importante consultare sempre le informazioni attualmente disponibili sull'URL di seguito per avere le informazioni sul prodotto più recenti al momento dell'uso. Documenti aggiuntivi come i manuali di utilizzo, bollettini tecnici, disegni dettagliati e raccomandazioni dettagliate e altri documenti rilevanti sono disponibili anche su www.gcpat.fr. Le informazioni trovate su altri siti web non dovrebbero essere utilizzati, in quanto potrebbero non essere aggiornati o applicabili alle condizioni del tuo paese e non ci assumiamo alcuna responsabilità quanto al loro contenuto. In caso di conflitti o se hai bisogno di ulteriori informazioni, contatta il servizio clienti di GCP.

Last Updated: 2023-06-15

gcpat.it/solutions/products/wrda-35