

ADVA[®] Cast 600

High-range water-reducing admixture -- ASTM C494 Type A and F and ASTM C1017 Type I

Product Description

ADVA[®]Cast 600 is a polycarboxylate based high-range water reducer designed for the production of conventional and Self Consolidating Concrete. ADVA[®]Cast 600 is formulated to provide extended slump life along with excellent workability without segregation.

ADVA[®]Cast 600 is supplied as a ready to use liquid that weighs approximately 8.9 lbs/gal (1.1 kg/L). ADVA[®]Cast 600 does not contain intentionally added chlorides.

Product Advantages

- Excellent moisture and air control
- Extended slump retention up to one hour
- Enhanced concrete cohesiveness with low viscosity for rapid placement
- Superior finish on cast surfaces
- Excellent early and later age compressive strength

Uses

ADVA[®]Cast 600 is a plant added superplasticizer that is formulated to impart improved workability to concrete over an extended period of time while still achieving high early age compressive strength. ADVA[®]Cast 600 can be used for the production of Self Consolidating Concrete (SCC) in precast/prestressed applications and may also be used in conventional concrete production.

ADVA[®]Cast 600 may be used to produce concrete in applications with very low water/cementitious ratios, where concrete stability and improved tolerance to material variability are required, while maintaining high levels of workability over long periods of time.

Addition Rates

ADVA[®]Cast 600 is an easy to dispense liquid admixture. Dosage rates can be adjusted to meet a wide spectrum of concrete performance requirements. Addition rates for ADVA[®]Cast 600 can vary from 2 to 10 fl oz/100 lbs (130 to 650 mL/100 kg) with the type of application, but will typically range from 3 to 6 fl oz/100 lbs (200 to 390 mL/100 kg) of cementitious. Should conditions require using more than the recommended addition rate, please consult your GCP Applied Technologies representative.

Mix proportions, cementitious content, aggregate gradations and ambient conditions will affect ADVA®Cast 600 dosage requirements. If materials or conditions require using more than the recommended addition rates, or when developing mix designs for Self Consolidating Concrete please consult your GCP Applied Technologies representative for more information and assistance.

Compatibility with Other Admixtures and Batch Sequencing

ADVA®Cast 600 is compatible with most GCP admixtures as long as they are added separately to the concrete mix. However, ADVA® products are not recommended for use in concrete containing naphthalene based admixtures including DARACEM®19 and DARACEM®100 and melamine based admixtures including DARACEM®65. In general, it is recommended that ADVA®Cast 600 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 and as conditions and materials change in order to assure compatibility with other admixtures, 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®, DAREX®, or AIRALON®3000 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

ADVA®Cast 600 is available in bulk, delivered by metered trucks, in totes and drums. ADVA®Cast 600 will freeze at approximately 32 °F (0 °C) but will return to full functionality after thawing and thorough mechanical agitation.

Dispensing Equipment

A complete line of accurate, automatic dispensing equipment is available.

gcpat.com | North America Customer Service: 1 877-4AD-MIX1 (1 877-423-6491)

This product or its use may be covered by US Patent Nos. 8,187,376; 8,317,918.

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