ADVA® XT2

Workability enhancing admixture -- ASTM C494 Type A

Product Description

ADVA®XT2 is a revolutionary advancement in time activated polycarboxylate-based technology. This patent pending, workability (slump and flow) enhancing admixture, when used in conjunction with many water reducers (standard, mid-range, or high-range), will significantly increase the duration of slump or flow retention. ADVA®XT2 is formulated to comply with the requirements of ASTM C494 Type A performance. ADVA®XT2 does not contain chloride as a functional ingredient. ADVA®XT2 is manufactured under closely controlled conditions and formulated for use as received. One gallon weighs approximately 8.7 lbs (1.1 kg/L).

Product Advantages

- Flexible degree of slump retention through adaptable dosing
- Increases slump life with minimal impact on set times
- Better control of operational costs by adjusting the slump life retention on an “as needed” basis during the initial dosage adjustment
- Eliminates the need for re-tempering with water at the job site
- Improves workability at job sites resulting in ease of placement

Uses

ADVA®XT2 is specifically intended for use where extended workability with minimal time of setting extension is desired without compromising plastic or hardened concrete properties. ADVA®XT2 produces concrete with consistent slump properties while providing the degree of workability necessary to provide easy placement and consolidation.

Conventional high-range water reducers may not provide sufficient slump life for applications with unpredictable or long transportation and placement times. As a result, concrete may be re-tempered with water at a job site to achieve desired workability. The addition of ADVA®XT2 used in conjunction with water reducers eliminates the need for re-tempering at job sites to achieve the desired workability.

Addition Rates

Addition rates of ADVA®XT2 can vary with the type of application and the desired slump specifications, but will range from 2 to 10 oz/100 lbs (130 to 650 mL/100 kg) of cementitious as an extended slump life admixture. In most instances, the addition of 4 to 6 oz/100 lbs (260 to 390 mL/100 kg) of cementitious will be sufficient. At higher dosage rates, some water may have to be removed from the mix to maintain plastic concrete cohesion. For concrete performance information using ADVA®XT2, please see GCP Technical Bulletin TB-0609, ADVA®XT2. GCP strongly recommends pretrial testing the concrete with ADVA®XT2 before production use to optimize dosage rates due to concrete materials, ambient conditions and project requirements that change over time. Please consult your GCP Applied Technologies representative for more information and assistance.

Compatibility with Other Admixtures and Batch Sequencing

ADVA®XT2 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. In general, it is recommended that ADVA®XT2 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 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®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

ADVA®XT2 is available in bulk delivered by metered trucks, in totes and drums.

ADVA®XT2 should be stored at temperatures above 32 °F (0 °C) and below 120 °F (50 °C) for proper dispensing and use. It will begin to freeze at 32 °F (0 °C), but will return to full strength after thawing and thorough agitation.

Dispensing Equipment

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

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gcpat.com/solutions/products/adva-high-range-water-reducers/adva-xt2