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ADVA® FLEX

High-range water-reducing admixture

ASTM C494 Type A and F, and ASTM C1017 Type I

Product Description

ADVA® FLEX is a revolutionary advancement in time activated polycarboxylate-based high-range water reducer technology. This patent pending, workability (slump and flow) enhancing admixture may be used as an every day high-range water reducer or at higher dosage rates it will significantly increase the length of slump or flow retention. ADVA FLEX is formulated to comply with the requirements of ASTM C494 Type A and F admixture and ASTM C1017 Type I plasticizing. ADVA FLEX does not contain chloride as a functional ingredient. ADVA FLEX is manufactured under closely controlled conditions and formulated for use as received. One gallon weighs approximately 8.9 lbs (1.1 kg/L).

Uses

ADVA FLEX is specifically intended for use where extended workability with minimal time of setting extension is desired without compromising plastic or hardened concrete properties. ADVA FLEX produces concrete with high slump properties and allows concrete to be produced with very low water/cement ratios 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 need to be re-tempered at a job site to achieve desired workability.

Product Advantages

- Flexibility to use as a traditional high-range water reducer or a workability retaining high-range water reducer
- Opportunity to better control operational costs by adjusting the slump life retention on an “as needed” basis during the initial dosage adjustment
- Concrete finishes easily without stickiness, spotty setting or tearing
- Added at the batch plant for rapid batching
- Eliminates the need for re-tempering at the job site

Addition Rates

Addition rates of ADVA FLEX can vary with the type of application, but may range from 4 to 14 oz/100 lbs (260 to 910 mL/100 kg) of cementitious as a conventional high-range water reducer with typical addition rates of 8 to 12 oz/100 lbs (520 to 780 mL/100 kg) as an extended slump life high-range water reducer. 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 FLEX, please see Grace Technical Bulletin TB-0607, *ADVA FLEX*. Grace strongly recommends pretrial testing the concrete with ADVA FLEX before production use to optimize dosage rates due to concrete materials, ambient conditions and project requirements that change over time. Please consult your Grace representative for more information and assistance. Distribute with permission only.

Compatibility with Other Admixtures and Batch Sequencing

ADVA FLEX is compatible with most Grace 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 ML 330 and Daracem 65. In general, it is recommended that ADVA FLEX 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 Grace Technical Bulletin TB-0110, *Admixture Dispenser Discharge Line Location and Sequencing for Concrete Batching Operations* for further recommendations. ADVA FLEX should not come in contact with any other admixture before or during batching, even if diluted in mix water.

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® or Darex® product lines) is recommended to provide suitable air void parameters for freeze-thaw resistance. Please consult your Grace representative for guidance.

Packaging & Handling

ADVA FLEX is available in bulk delivered by metered trucks, in 275 gal (1040 L) disposable totes and in 55 gal (208 L) drums.

ADVA FLEX 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.

www.graceconstruction.com

North American Customer Service: 1-877-4AD-MIX1 (1-877-423-6491)

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