TECHNICAL DATA SHEET

Chryso Concrete Solutions

09/18/2025

Chryso®Adva Cast 585

High Range Water Reducing Admixture

DESCRIPTION

Adva®Cast 585 admixture is a high efficiency, low addition rate polycarboxylate-based high-range water reducer designed for the production of a wide range of concrete mixes, from conventional to Self Consolidating Concrete. It is designed to impart extreme workability without segregation to the concrete.

Meets or exceeds the requirements of ASTM C494 Type A & F, and ASTM C1017 Type I. The product is supplied as a ready-to-use liquid that weighs approximately 1.1 kg/L (9.0 lbs/gal). Adva®Cast 585 high-range water reducer does not contain intentionally added chlorides.

ADVANTAGES

- Excellent dosage efficiency, moisture control and air control
- Superior air entrainment control
- Excellent entrained air quality
- Enhanced concrete cohesiveness with low viscosity for rapid placement
- Superior finish on cast surfaces
- Enhanced strength development

FIELDS OF APPLICATION

- Formulated to impart improved workability to the concrete and to achieve high early compressive strength as required by the precast industry.

Method of Use

Dosage

- Adva®Cast 585 high-range water reducer is an easy to dispense liquid admixture. Dosage rates can be adjusted to meet a wide spectrum of concrete performance requirements. Addition rates for the product can generally vary from 130 to 780 mL/100 kg (2 to 12 fl oz/100 lbs) with the type of application, and has been used as high as 1300 mL/100 kg (20 fl oz/100 lbs) of cementious materials in special cases. However, dosages will typically range from 200 to 390 mL/100 kg (3 to 6 fl oz/100 lbs) of cementitious materials. Should conditions require using more than the recommended addition rate, please consult your representative.
- Mix proportions, cementitious content, aggregate gradations and ambient conditions will affect the product's 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 representative for more information and assistance.

Additional Usage Recommendations

- Adva®Cast 585 high-range water reducer is formulated to impart improved workability to the concrete and to achieve high early compressive strength as required by the precast industry. It 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 585 high-range water reducer may be used in low water-cementitious ratio applications where concrete stability and improved tolerance to concrete material variability are required. The product may also be used to produce concrete with very low water/cementitious ratios while maintaining normal levels of workability

Equipment

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

The information contained in this technical data sheet is given to the best of our knowledge and the result from extensive testing - which were conducted in order to remain as objective as possible. However, it cannot, in any case, be considered as a warranty involving our liability in case of misuse or any different use of our products, other than those from the "Applcation" paragraph of this technical data sheet. Some application tests should be carried out before using the product to ensure that the methods of use and conditions of application of the product are satisfactory. Our technical assistance is at the disposal of the users.

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Complimentary Products

- Adva®Cast 585 high-range water reducer is compatible with most 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® Cast 585 high-range water reducer 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 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® or DAREX® product lines) is recommended to provide suitable air void parameters for freeze-thaw resistance.

CHARACTERISTICS

Product Nature	Liquid
Color	Amber-Brown
Shelf life	12 months
Specific gravity (25°C)	1,080
pH (25°C)	5,20

PACKAGING

- Bulk
- 210L Drum (55 gallons)
- IBC 1000L

PRECAUTIONS

- The product will freeze at approximately 0°C (32°F) but will return to full functionality after thawing and thorough mechanical agitation.

SAFETY

Prior to any use, please read carefully the Safety Data Sheet.

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