

Adva® Cast 575

High Range Water Reducing Admixture

DESCRIPTION

Adva® Cast 575 is a high-range water-reducing admixture designed to deliver extreme workability, improving flow characteristics, placement efficiency, and mix versatility. It is ideal for a wide range of concrete applications, from conventional mixes to Self-Consolidating Concrete (SCC), requiring high performance at low addition rates. This product features a high-efficiency, polycarboxylate-based formulation, making it well-suited for producing highly workable concrete without segregation.

Meets or exceeds the requirements:

- **ASTM: C494 Type A, F and ASTM C1017**
- **AASHTO: M194, Type A, F**
- **NSF/ANSI/CAN 61 Certified Admixture**

ADVANTAGES

- Maximizes efficiency in dosage, moisture, and air control
- Regulates air entrainment for consistent performance
- Improves cohesiveness for rapid, low-viscosity placement
- Delivers superior finish quality on cast surfaces
- Accelerates strength development for enhanced performance

FIELDS OF APPLICATION

- All Cement Types
- Precast Concrete
- Prestressed Concrete
- Self-Consolidating Concrete
- Ready-Mix Concrete
- High-Performance Concrete

Method of Use

Dosage

- Dosage rates vary based on cement type, mix design, aggregate properties, environmental conditions, and project requirements.
- The typical dosage range is 2–10 fl oz/100 lbs (130–650 mL/kg) of cementitious material.
- If conditions require using more than the recommended addition rates, please consult your Chryso® representative.

Implementation

- It is recommended that the product be added near the end of the batch sequence for optimum performance. Different sequencing may be used if local testing shows better performance.
- Please see [Admixture Dispenser Discharge Line Location & Sequencing for Concrete Batching Operations](#) for more information on product implementation.
- 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.

Equipment

- This product can be automatically dispensed using a complete line of accurate and reliable dispensing equipment designed for seamless integration into concrete batching systems.

Complimentary Products

- Adva® Cast 575 is compatible with most Chryso® admixtures as long as they are added separately to the concrete mix.

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 "Application" 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.

TECHNICAL DATA SHEET



Chryso
Concrete
Solutions

10/31/2025

Adva® Cast 575

High Range Water Reducing Admixture

- This product is not compatible with admixtures containing naphthalene-based or melamine-based components, as these may negatively impact performance.
- For concrete that requires air entrainment, the use of an ASTM C260 air-entraining agent is recommended to provide suitable air void parameters for freeze-thaw resistance.
- Pretesting is recommended to verify compatibility with all mix components and ensure desired performance outcomes.
- Consult your Chryso® representative for guidance on product combinations & compatibility.

Performances

- Improves workability to support efficient concrete placement and finishing
- Achieves high early compressive strength suitable for precast and prestressed applications
- Enables production of Self-Consolidating Concrete with enhanced stability
- Maintains normal workability in very low water-cementitious ratio mixes
- Increases tolerance to variability in concrete materials for more consistent performance

CHARACTERISTICS

Product Nature	Liquid
Color	Blue green
Shelf life	12 months
Specific gravity (25°C)	1,079
pH (25°C)	5,20

PRECAUTIONS

- Avoid prolonged exposure to temperatures below 32°F (0°C), as extreme conditions may affect product performance.
- If the product is exposed to freezing temperatures, gently thaw and agitate thoroughly before use.

SAFETY

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

PACKAGING

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

ADDITIONAL INFORMATION

ADVA® Cast 575 ASTM C494 Type F High-Range Water Reducer Test Data

	US UNITS - CONTROL	US UNITS - ADVA® CAST 575	METRIC - CONTROL	METRIC - ADVA® CAST 575
Cement (pcy) (kg/m³)	517	517	307	307
Coarse aggregate (pcy) (kg/m³)	1944	1944	1153	1153
Fine aggregate (pcy) (kg/m³)	1144	1214	679	720
Water (pcy) (kg/m³)	248	211	147	125
w/cm	0.48	0.41	0.48	0.41
Slump (inches) (mm)	3.5	3.25	89	83
Plastic air (%)	5.4	5.5	5.4	5.5
Compressive strength				
1 day (psi) (MPa)	1460	2050	10.1	14.1
7 day (psi) (MPa)	4380	6040	30.2	41.6
28 day (psi) (MPa)	5570	7270	38.4	50.1
Initial set time (hr:min)	4:56	3:57	4:56	3:57
Length change 28 day (%)	-0.027	-0.029	-0.027	-0.029
Freeze-thaw resistance (RDME %)	88	91	88	91

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