

DARASET® 400

Accelerating Admixture
Non-Chloride

DESCRIPTION

DARASET® 400 is a non-corrosive, non-chloride set accelerator that offers setting time results and early strength development comparable to calcium chloride, but without the corrosive effects.

Meets or exceeds the requirements of ASTM C494 Type C and can be used at any dosage to meet ACI 318 Guidelines for Chloride Content in Concrete.

ADVANTAGES

- Accelerates setting time
- Increases early compressive and flexural strengths
- Offsets the retarding effects of pozzolans such as slag or fly ash
- Enables cold weather concreting

FIELDS OF APPLICATION

- All Cement Types
- Precast Concrete
- Ready-Mix Concrete
- Concrete Patching
- Very High Early Strength Concrete
- Pre-Stressed Concrete

Method of Use

Dosage

- DARASET® 400 dosage rates can vary with the type of application. The addition rate can range between 10 oz/cwt and 60 oz/cwt (650 mL/100 kg and 3910 mL/100 kg) of cementitious material.
- Optimal addition rates will depend upon specific job conditions, on local materials and on the degree of set acceleration & early strength development required.
- Typical results show that when concrete containing DARASET® 400 is poured at 50°F (10°C), the concrete will set up to 2 hours faster than the reference concrete.
- Addition rates may vary when used in conjunction with other CHRYSO® admixtures.
- Should conditions require using more than the recommended addition rates, please consult your CHRYSO® representative.

Additional Usage Recommendations

- Suitable for use in concrete placed on steel-clad or zinc-coated steel decks where corrosion prevention is crucial.

Implementation

- In general, it is recommended that DARASET® 400 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.
- When used in air entrained concrete, trial mixes must be made to determine the quantity of air-entraining admixture required.
- The concrete producer should account for the water contained in the product. Each gallon of DARASET® 400 added to a concrete mix will contribute 6.3 lbs (0.76 kg/L) of water to that mix.
- 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.

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

DARASET® 400

Accelerating Admixture
Non-Chloride

Chryso
Concrete
Solutions

02/18/2025

Complimentary Products

- DARASET® 400 is compatible with most CHRYSO® admixtures as long as they are added separately to the concrete mix, usually through the water holding tank discharge line.
- 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.

Performances

- Provides shorter set times and increased early compressive & flexural strengths.

CHARACTERISTICS

Product Nature	Liquid
Color	Light brown
Shelf life	18 months
Cl ⁻ Ions content	< 0,100 %
Specific gravity (25°C) in g/ml	1,453
pH (25°C)	9,30

PRECAUTIONS

- Product will begin to freeze at approximately -10°F (-23°C), but will return to full strength after thawing and thorough agitation.
- Do not use pressurized air for agitation.

SAFETY

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

PACKAGING

- Bulk
- 1000L Tote (275 gallons)
- 210 L (55 Gallons) Drum

ADDITIONAL CERTIFICATIONS & MARKINGS

- DARASET® 400 is NSF Std. 61 certified when used at a maximum addition rate of 40 fl oz/100 lbs (2600 mL/100 kg) of cementitious material. Certification of compliance will be made available upon request.

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