

Chryso® Clarena MC2000

Normal Water Reducing Admixture

DESCRIPTION

Chryso® Clarena MC2000 is a patented mid-range water reducing admixture. It is manufactured under rigorous quality control to ensure uniform, predictable performance. The product does not contain added calcium chloride, weighs approximately 8.7 lbs/gal (1.04 kg/L), and meets the requirements of ASTM C494 Type A and F.

Chryso® Clarena MC2000 is a proprietary aqueous formulation incorporating polycarboxylate and highly purified specialty organic chemicals especially designed to deliver superior and predictable water reduction over a wide range of aggregate clay contents. The superior dispersion capability produces concrete with significantly improved early and ultimate compressive strengths while maintaining near neutral set times.

ADVANTAGES

- Linear water reduction
- Excellent slump retention
- Superior strength performance
- Neutral set times
- Superior workability and finishability
- Excellent plastic and hardened air control
- Excellent dose efficiency in presence of clays

FIELDS OF APPLICATION

- Ready Mix
- Job Site & Concrete Paving Plants
- Normal and light-weight concrete and precast products

Method of Use

Dosage

- Addition rates may be varied to achieve the desired water reduction and set time. Typically, addition rates can vary from 2–15 fl oz /100 lbs (130–1000 mL/100 kg), but will typically range from 6-12 fl oz/100 lbs (390-780 mL/100 kg) of cementitious materials.
- Addition rates may vary depending on materials, job conditions and desired performance characteristics. Please consult your Chryso representative for information and assistance.

Additional Usage Recommendations

- Chryso® Clarena MC2000 admixture is recommended for use with a wide range of concrete slumps where superior finishing characteristics are desired, particularly in commercial and residential flatwork and formed concrete applications.
- The admixture shall be delivered as a ready-to-use, liquid product and shall not contain added calcium chloride. It shall be used in strict accordance with manufacturer's recommendations.

Equipment

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

Complimentary Products

- Chryso® Clarena MC2000 admixture 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. However it is not recommended for use in concrete containing naphthalene-based admixtures.

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.

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- In general, it is recommended that the product 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.
- 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.
- Please consult your Chryso representative for guidance.

Performances

- Chryso® Clarena MC2000 offers significant advantages over conventional water reducers , especially in environments where a wide range of aggregate clays are present:
- **Linear water reduction capability** The neutral set capability of the product throughout a wide range of dosage rates allows the producer to have “peace of mind” by knowing they can utilize a single admixture to meet all their water reducer and admixture needs and requirements. The versatile water reduction capability may be used to produce high quality, workable concrete over a wide range of water/cement ratios.
- **Superior strength performance** The superior water reduction properties and excellent dispersion characteristics allow the production of lower water to cement ratio concrete, with more complete cement hydration. This combined effect results in increased compressive and flexural strengths at all ages.
- **Superior workability and finishability** The exceptional water reducing performance allows for concrete production at typically desired 3 to 8 in. (75 to 200 mm) slumps, providing smooth flowing concrete with improved placement properties. Floating and troweling, by machine or by hand, easily imparts a smooth, close tolerance surface with less machine time and labor.
- **Excellent plastic and hardened air control** Concretes treated with Chryso® Clarena MC2000 exhibit more reproducible AEA demand from batch-to-batch, small, predictable entrained air reduction over time.
- **Excellent resistance to the effects of clays** The polycarboxylates in Chryso® Clarena MC2000 are not readily absorbed by swellable clays, such as smectites, on the aggregates. This characteristic ensures predictable batch-to-batch water reduction, and a cost effective alternative to older sulfonated, and variable, natural products.

CHARACTERISTICS

Product Nature	Liquid
Color	Brown
Shelf life	9 months
Cl ⁻ Ions content	< 0,100 %
Specific gravity (25°C)	1,053
pH (25°C)	4,80

PRECAUTIONS

- The product will begin to freeze at approximately 25 °F (-4 °C) but will return to full strength after thawing and thorough agitation. In storage and for proper dispensing, the temperature should be maintained above 32 °F (0 °C).

SAFETY

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

PACKAGING

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