TECHNICAL DATA SHEET

Chryso Concrete Solutions

06/27/2025

MIRA® 110

Mid-Range Water Reducing Admixture

DESCRIPTION

MIRA® 110 is a linear dose mid-range and high-range water-reducing admixture, manufactured under rigorous quality control to ensure uniform, predictable performance. MIRA® 110 does not contain added calcium chloride. MIRA® 110 weighs approximately 8.8 lbs/gal (1.06 kg/L).

The superior dispersion capability of MIRA 110 produces concrete with significantly improved early and ultimate compressive strength. MIRA® 110 is formulated to provide neutral set times at lower ambient temperatures and/or with the use of pozzolans. At 70°F (20°C) MIRA® 110 will provide fast set times.

ADVANTAGES

- Mid-range and high-range water reduction capability
- Superior strength performance
- Neutral set times at lower ambient temperatures
- Neutral set times when pozzolans are used
- Superior workability and finishability
- Improved performance with pozzolans

FIELDS OF APPLICATION

MIRA® 110 can be used in a ready-mix, job site, and concrete paving plants for normal and lightweight concrete, and in block and precast products.

Method of Use

Dosage

- MIRA® 110 is recommended for use with a wide range of concrete slumps including 4 to 9 in. (100 to 225 mm) where superior finishing characteristics is desired, particularly in commercial and residential flatwork, and formed concrete applications. MIRA® 110 may be used in a wide variety of applications, including ready-mix, job site, and concrete paving plants for normal and lightweight concrete, and in block and precast products.

Additional Usage Recommendations

- Addition rate may be varied to achieve the desired water reduction and set time. The addition rate can range between 2 fl oz/100 lb and 20 fl oz/100 lb (130 mL/100 kg and 1300 mL/100 kg) of cemen-titious materials. Typically, addition rates as a mid-range water reducer are 6–9 fl oz/100 lbs (390–585 mL/100 kg) and as a high-range water reducer are 10-15 fl oz/100 lbs (650- 1000 mL/100 kg) of cementitious materials. Other addition rates may be used if testing with local materials provides the required performance. Addition rates may vary depending on materials, job conditions and desired performance characteristics.
- The cement paste or mortar provided by MIRA® 110 concrete has improved trowelability. Floating or troweling by hand or machine imparts a smooth, close tolerance surface.

Equipment

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

Complimentary Products

- MIRA® 110 is compatible with most admixtures as long as they are added separately to the concrete mix, usually through the water holding tank discharge line. However MIRA® 110 is not recommended for use in concrete containing naphthalene-based admixtures including DARACEM® 19 and DARACEM® 100, and melamine-based admixtures including DARACEM® 65. In general, it is recommended that

chryso SAINT-GOBAIN

MIRA® 110

Mid-Range Water Reducing Admixture

MIRA® 110 be added to the concrete mix near the end of the batch sequence for optimum performance. Please see Technical Bulletin TB-0110, *Admixture Dispenser Discharge Line Location and Sequencing for Concrete Batching Operations* for further recommendations. Different sequencing may be used if local testing shows better performance.

- Pretesting of the concrete mix should be performed before use, and as conditions and materials change in order to ensure compatibility, 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	Colourless to light yellow
Shelf life	9 months
Cl^- Ions content	< 0,100 %
Specific gravity (25°C)	1,178
pH (25°C)	9,40

PACKAGING

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

ADDITIONAL CERTIFICATIONS & MARKINGS

- Concrete shall be designed in accordance with *Standard Recommended Practice for Selecting Proportions for Concrete*, ACI 211.
- The mid-range water-reducing admixture shall be manufactured to meet all the requirements of *Specification for Chemical Admixtures for Concrete*, ASTM Designation C494 as a Type A and Type F admixture.
- The admixture shall be delivered as a ready-to use, liquid product and shall not require mixing at the batching plant or job site. The admixture shall not contain added calcium chloride. It shall be used in strict accordance with manufacturer's recommendations.

PRECAUTIONS

- MIRA® 110 will begin to freeze at approximately 25°F (-5°C) but will return to full strength after thawing and thorough agitation. In storage and for proper dispensing, the temperature of MIRA 110 should be maintained above 32°F (0°C).

SAFETY

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

chryso SAINT-GOBAIN