TECHNICAL DATA SHEET

Eclipse® Floor 200

Shrinkage Reducing Admixture



DESCRIPTION

Eclipse* Floor 200 is a liquid admixture designed to reduce drying shrinkage and curling, improving joint spacing, floor stability, and overall durability. It is ideal for indoor slab-on-grade concrete construction requiring extended joint spacings.

Meets or exceeds the requirements of ASTM C494 Type S

ADVANTAGES

- Reduces drying shrinkage and curling, enabling joint spacing
- Provides flatter floors with minimal defects
- Saves time and costly repairs
- Enhances durability, providing longer usable life

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 0.5 to 1.5 gal/yd³ (2.5 to 7.5 L/m³), although doses as low as 0.2 gal/yd³ (1 L/m³) and as high as 2.5 gal/yd³ (12.5 L/m³) have been used.
- This product reduces the surface tension of pore water. Its effectiveness depends on the concentration as a percentage of the mix water.
- The ideal dosage is typically 2.5 to 5% of the mix water. For mortar and paste, which have higher water content, this dosage guidance can help determine the best addition rates.
- The product itself contains no water but is added in high amounts and should be considered in the mixture design. In a standard concrete mix, 1.5 gal/yd³ (7.5 L/m³) of this product will affect the concrete's porosity and slump similarly to the same volume of water. It's recommended to replace an equal volume of water with this product in the mixture design.
- If conditions require using more than the recommended addition rates, please consult your Chryso representative.

Additional Usage Recommendations

• This product is designed for indoor slab-on-grade construction and is suitable for concrete without entrained air, where controlling drying shrinkage and cracking is important. It can significantly increase joint spacings, resulting in flatter, more durable, and lower-maintenance floors.

Implementation

- It is recommended that the product be added after the dry materials and most of the water for optimum performance. Different sequencing may be used if local testing shows better performance.
- Please see <u>Admixture Dispenser Discharge Line Location & Sequencing for Concrete Batching Operations</u> 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

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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• 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

- Eclipse Floor 200 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.
- Although this product is compatible with air-entraining agents, it has air-detraining properties, making it difficult to entrain air in concrete.
- This product has slight retarding properties (set times are typically extended less than one hour). If used in combination with other products exhibiting retarding properties the net retardation may be more than the simple additive effect of the two products used separately.
- 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

- Drying Shrinkage of Concrete This admixture reduces the surface tension of water. With reduced surface tension, the force pulling in on the walls of the pores is reduced, leading to a reduction in shrinkage strain. At a dosage of 1.5 gal/yd³ (7.5 L/m³), this effect can result in up to 80% reduction at 28 days and up to 50% at one year or beyond.
- Impact on Fresh Concrete Properties When substituted in a mixture design for an equivalent volume of water, this product has little or no effect on concrete slump. It may have a slight retarding effect (typically less than one hour of extended set time) and can help extend slump life. It is also a potent air detrainer and will make air entrainment in concrete more difficult.
- Impact on Hardened Concrete Properties The primary effect is a reduction in drying shrinkage. However, its use typically causes a 10 to 15% reduction in concrete compressive strength. In established concrete mixtures where maintaining strength is critical, mid-range water reducers or superplasticizers can be used to reduce water content, helping to offset the strength reduction without compromising shrinkage control.

CHARACTERISTICS

Product Nature	Liquid
Color	Colourless to light yellow
Shelf life	36 months
Cl⁻ lons content	< 0,100 %
Specific gravity (25°C)	0,922

PRECAUTIONS

- During concrete placement and finishing, small amounts of the product may volatilize and cause eye and throat irritation. Ensure adequate ventilation to prevent this irritation.
- 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
- 210 L (55 Gallons) Drum
- 1000L Tote (275 gallons)

