TECHNICAL DATA SHEET

ECLIPSE® Floor AN

Shrinkage Reducing Admixture

Chryso Concrete Solutions

DESCRIPTION

ECLIPSE® Floor AN is a liquid admixture for concrete that significantly reduces drying shrinkage and the potential for drying shrinkage-induced cracking and curling. Rather than functioning as an expansive agent, ECLIPSE® Floor AN acts by reducing the surface tension of pore water. ECLIPSE® Floor AN is specifically formulated for use in non air-entrained concrete applications. Drying shrinkage of concrete is a complicated phenomenon, widely acknowledged to be the function of several mechanisms.

The driving factor causing shrinkage for internal relative humidity in excess of 40% is the surface tension of water. As water-filled pores in the size range of 2.5 to 50 nm (nm or nanometre, is one billionth of a metre) lose moisture, curved menisci are formed and the surface tension of water pulls the walls of the pores. ECLIPSE® Floor AN reduces the surface tension of water, thereby reducing the force pulling in on the walls of the pores – and the resultant shrinkage strain is reduced. ECLIPSE® Floor AN complies with AS 1478.1-2000, Type SN.

BENEFITS

- Reduces drying shrinkage and curling, enables to increase joint spacings
- Contains no expansive material but, highly reduces primary internal forces that cause shrinkage and curling
- Low maintenance costs over service life of the structure

APPLICATION

- Slab-on-grade construction
- Structures that require control drying shrinkage cracks
- Increase in joint spacings for flatter and durable floors

INDICATIVE INFORMATION

Product Nature	liquid
Color	Clear
Lifetime	12 months
Specific gravity (kg)	0,920

PACKAGING

- Bulk
- IBC 1000L
- 205 L Drum
- Pail

METHOD OF USE

Dosage:

Typical dose rate of ECLIPSE® Floor AN will be in the range of 2.0 to 8.0 L / m³. Since ECLIPSE® Floor AN works primarily to reduce the surface tension of pore water, it primarily works as a function of the concentration as a percent by weight of the mix water. Therefore, if the total water content of a concrete mix is reduced, less ECLIPSE® Floor AN is required to obtain optimum results. ECLIPSE® Floor AN is a clear liquid admixture. It contains no water, but is added at high dosages and should be accounted for in the mix design. For a conventional concrete mix with 6.0 L / m³ of ECLIPSE® Floor AN, an equivalent volume of water should be reduced from the mix design. ECLIPSE® Floor AN may be added to the concrete batch sequencing at any time.

Equipment:

Please contact your local Chryso representative for further information regarding the dispensing equipment for this product.

COMPATIBILITY

- Compatible with all Chryso admixtures
- Mid-range water reducers such as MIRA®
- High-range water reducers such as ADVA®

SAFETY

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





