

# Chryso® Darex AEA EH

Air entraining admixture

## DESCRIPTION

Darex® AEA EH is an air-entraining admixture specifically formulated to generate a highly stable air void system for increased protection against damage from freeze-thaw cycles, severe weathering, or de-icer chemicals.

**Meets or exceeds the requirements of ASTM C260 Standard Specifications for Air-Entraining Admixtures for Concrete**

## ADVANTAGES

- Produces stable air voids, making it particularly useful for longer transit times
- Performs reliably & consistently across a wide spectrum of concrete materials
- Improves the durability of concrete to freeze-thaw cycles
- Facilitates entrainment in concretes that are typically difficult to air entrain

## FIELDS OF APPLICATION

- All Cement Types
- Precast Concrete
- Post Tensioned & Prestressed Concrete
- Ready-Mix Concrete
- Concrete Exposed to Freeze-Thaw Cycles

## Method of Use

### Dosage

- Darex® AEA EH dosage rates can vary with the type of application. The addition rate can range between 0.5 oz/cwt and 5 oz/cwt (30 mL/100 kg and 320 mL/100 kg) of cementitious material.
- Optimal addition rates will depend on temperature, cement, sand gradation, and the use of extra fine materials such as fly ash and microsilica.
- Dosage rates may vary when used in conjunction with other Chryso® admixtures. The air-entraining capacity of Darex® AEA EH is usually increased when other concrete admixtures are contained in the concrete, particularly water-reducing and set-retarding admixtures. This may allow up to 25% reduction in the amount of product required.
- Should conditions require using more than the recommended addition rates, please consult your Chryso® representative.

### Additional Usage Recommendations

- Formulated to perform across the entire spectrum of production mixes, it generates specification quality, freeze-thaw resistant air systems in concrete.
- Ideal for mixes with microsilica and with fly ash.

### Implementation

- In general, it is recommended that Darex® AEA EH be added early in the batching sequence for optimum performance, preferably by “dribbling” on the sand.
- Product should not be added directly to heated water.
- 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 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.

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### Equipment

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

### Complimentary Products

- Darex® AEA EH is compatible with most Chryso® admixtures as long as they are added separately to the concrete mix.

### Performances

- Incorporates air into the concrete by the mechanics of mixing and stabilizing millions of discrete semi-microscopic bubbles.
- Promotes the mobility, or plasticity and workability of the concrete through air bubbles that act much like flexible ball bearings.
- Enables a reduction in mixing water with no loss of slump
- Optimizes coarse sand particle size distribution
- Aids placeability while minimizing bleeding, plastic shrinkage and segregation.
- Increases the volume of the concrete making it necessary to adjust the mix proportions to maintain the cement factor and yield.
- Produces impart resistance to the action of frost and de-icing salts as well as sulfate, sea and alkaline waters.

## CHARACTERISTICS

<b>Product Nature</b>	Liquid
<b>Color</b>	Straw coloured
<b>Shelf life</b>	12 months
<b>Cl<sup>-</sup> ions content</b>	< 0,100 %
<b>Specific gravity (25°C)</b>	1,020
<b>pH (25°C)</b>	10,30

## PRECAUTIONS

- Product will begin to freeze at approximately -30 °F (-1 °C), but will return to full capabilities 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

- Concrete shall be air entrained concrete, containing 4% to 8% entrained air.
- The air contents in the concrete shall be determined by the pressure method (ASTM Designation C231) or gravimetric method (ASTM Designation C138).
- The air-entraining admixture shall be DAREX® AEA or equal.
- The air-entraining admixture shall be added at the concrete mixer or batching plant in such quantities as to give the specified air contents.

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