

# Daravair® AT30

Air entraining admixture

## DESCRIPTION

DARAVAIR® AT30 is a liquid air-entraining admixture that provides freeze-thaw resistance, enhances the finishability characteristics of concrete and allows concrete producers to accurately control yield. DARAVAIR® AT30 is comprised of a blend of high-grade saponified rosin and organic acid salts and is manufactured under stringent controls, assuring quality and consistent performance. One gallon weighs approximately 8.5 lbs (1.02 kg/L).

## ADVANTAGES

- Air stability makes it particularly useful for longer haul times
- Functions well across a wide range of concrete materials

## FIELDS OF APPLICATION

- All Cement Types
- Precast Concrete
- Post Tensioned and Prestressed Concrete
- Ready Mix Concrete
- Concrete Exposed to Freeze Thaw
- Optimization of coarse sand particle size distribution

## Method of Use

### Dosage

- DARAVAIR® AT30 addition rates will vary according to the specified level of air required. Addition rates are also influenced by several variables including: specific mix design parameters, material properties of the cement, fly ash, coarse and fine aggregates and the effects of other chemical admixtures. Other factors such as ambient and concrete temperature, mixing time and time of addition can also affect the required dosage rates. It is recommended that pre-job testing be conducted in order to assure the correct dosage rate of DARAVAIR® AT30 is used. Typical DARAVAIR® AT30 addition rates range from ¼ to 3 fl oz/100 lbs of cement (15 to 200 mL/100 kg).

### Additional Usage Recommendations

- DARAVAIR® AT30 is recommended for use in all ready-mix, precast, prestress and other concrete product plants where the intentional entrainment of a specified level of air is required. ACI 201 Guide to Durable Concrete recommends all concrete which is exposed to any level of freeze-thaw exposure or is subjected to the application of de-icing salts during the winter months should be air entrained.
- DARAVAIR® AT30 has been found to be particularly effective in both high cement factor and low slump concrete mixes, which require a very efficient air-entraining admixture. DARAVAIR® AT30 is also utilized when a very stable air void system over time is required.
- The concrete shall be intentionally air entrained, containing a specified level of entrained air. The plastic air content shall be determined by ASTM C231 pressure method, ASTM C173 volumetric method or ASTM C138 gravimetric method. The air entrainment admixture shall be DARAVAIR® AT30, as manufactured by GCP Applied Technologies, and will comply with ASTM C260 specification for air-entraining admixtures. The dosage rate of DARAVAIR® AT30 will be determined on an individual basis to satisfy the specified requirement for the particular job.

### 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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- A complete line of accurate dispensing equipment is readily available to dispense DARAVAIR® AT30. The dispensers can be installed to discharge the product into the water line, on the sand, or directly in the mixer.

### Complimentary Products

- DARAVAIR® AT30 is compatible with most admixtures as long as they are added separately to the concrete mix. In general, it is recommended that DARAVAIR® AT30 be added to the concrete mix near the beginning of the batch sequence for optimum performance, preferably by "dribbling" on the sand. Different sequencing may be used if local testing shows better performance. Please see [Technical Bulletin TB-0110, Admixture Dispenser Discharge Line Location and Sequencing for Concrete Batching Operations](#) for further recommendations. DARAVAIR® AT30 should not be added directly to heated water.
- Pretesting of the concrete mix should be performed before use, as conditions and materials change in order to assure compatibility, and to optimize dosage rates, addition times in the batch sequencing and concrete performance. Please consult your Chryso representative for guidance.

### Performances

- Air is incorporated into concrete via mixing mechanics and stabilized into millions of discrete semi-microscopic bubbles in the presence of air-entraining admixtures such as DARAVAIR® AT30. These air bubbles act much like flexible ball bearings, thereby increasing the plasticity and workability of the concrete. This allows for reductions in mixing water with no loss of slump. Surface bleeding, plastic shrinkage and aggregate segregation are also minimized.
- Through the purposeful entrainment of air, DARAVAIR® AT30 markedly increases the durability of concrete to severe exposures, particularly freeze-thaw cycling. It has also demonstrated a remarkable ability to 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>	Brown
<b>Shelf life</b>	12 months
<b>Cl<sup>-</sup> Ions content</b>	< 0,100 %
<b>Specific gravity (25°C)</b>	1,017
<b>pH (25°C)</b>	10,60

### PRECAUTIONS

- DARAVAIR® AT30 should be protected from temperatures below 32 °F (0 °C), but if freezing does occur, thorough mechanical agitation after thawing will restore it to full strength.
- Adhere to SDS (Safety Data Sheet) guidelines when handling product.

### SAFETY

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

### PACKAGING

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