

Chryso®Darex AE3P

Air entraining admixture

DESCRIPTION

Chryso®Darex AE3P is a liquid air-entraining admixture developed for use in the production of air-entrained concrete, concrete blocks, and cement-based compositions. It introduces a controlled system of stable air voids within the concrete matrix, improving durability and workability.

Formulated from carefully selected raw materials and based on an ether sulfate salt, Chryso®Darex AE3P is manufactured under controlled conditions to ensure consistent quality and performance. The product conforms to **EN 934-2** for air-entraining admixtures.

BENEFITS

- Improves resistance to freeze/thaw cycles
- Enhances resistance to de-icing salts and other aggressive liquids
- Improves workability and reduces segregation in concrete and mortar
- Reduces bleeding of excess mixing water
- Entrained air remains stable during standing and prolonged mixing
- Particularly effective with sands that are difficult to air-entrain
- May increase strength in lean concrete or mixes containing crushed aggregates
- Increases the volumetric yield of concrete proportionally to the air entrained

FIELDS OF APPLICATION

Chryso®Darex AE3P is suitable for use in:

- Air-entrained concrete
- Concrete blocks
- Cement-based mortars and compositions

The product is compatible with most Portland cements and is effective in concretes containing fly ash or ground granulated blastfurnace slag (GGBS). For use with special cements, consult Chryso Technical Services.

Chryso®Darex AE3P must not be premixed with other admixtures.

- All admixtures should be added separately
- The presence of other chemical admixtures may affect performance

Consult Chryso Technical Services for combined admixture systems.

INDICATIVE INFORMATION

Product Nature	Liquid
Color	Amber
Lifetime	12 months

METHOD OF USE

Dosage :

Typical dosage range:

- 140 – 500 ml per 100 kg of cement**
- Equivalent to **0.14 – 0.50%** by weight of cement

As a guide for initial trials, an addition rate of **0.14 – 0.24%** by weight of cement is recommended.

Notes:

- Concretes containing fly ash may require up to **twice the stated dosage range**
- Semi-dry mixtures typically require higher dosages
- Final dosage selection must be confirmed through site trials

Chryso®Darex AE3P is supplied ready for use.

- Add during the mixing process, either with the mixing water or with the aggregates
- The required dosage depends on mix characteristics and target air content

Factors influencing performance include:

- Aggregate grading and fines content
- Cement type and content
- Water/cement ratio
- Workability and temperature
- Type and efficiency of mixing equipment

Normal site control typically delivers consistent results.

PRECAUTIONS

- Store away from extremes of temperature
- Protect from frost
- Keep containers sealed and out of direct sunlight

SAFETY

For health, safety, and environmental information, refer to the relevant Safety Data Sheet.

Standard chemical handling precautions apply. Avoid contact with

Chryso® Darex AE3P

Air entraining admixture

Cl ⁻ Ions content	< 0,100 %
Equivalent Content Na ₂ O	≤ 0,35 %
Specific gravity	1,000
Freezing Point	-2 °C
Air Entrainment	See Dosage section

skin and eyes. Suitable personal protective equipment should be worn.

For further information, please refer to the safety data sheet on our internet site www.uk.chryso.com.

PACKAGING

- 15L Container
- Container of 1000L
- Bulk delivery on request

ADDITIONAL INFORMATION

Overdosing will result in:

- Increased air content
- Increased workability

The magnitude of these effects depends on the degree of overdose.