

Chryso®WRDA 90

Mid-Range Water Reducing Admixture

DESCRIPTION

Chryso®WRDA 90 is a mid-range water reducing admixture designed for use in concrete and cement-based grouts. It can be used to reduce water content in concretes of normal workability, resulting in increased early and ultimate compressive strength, as well as improved durability.

Chryso®WRDA 90 acts as a powerful deflocculating agent, dispersing cement particles to significantly improve the flow characteristics of the cement paste. It may be used as a plasticiser at low dosages or as a mid-range water reducer at moderate dosages, without excessive retardation. The product is manufactured under controlled conditions and conforms to **EN 934-2**.

BENEFITS

- Typical water reduction of around **10%**, leading to improved strength and durability
- Facilitates reduction in cement content
- Predictable and controlled setting characteristics within the recommended dosage range
- Compatible with fly ash and GGBS concretes
- Extends workability retention, particularly in high ambient temperatures
- Improves concrete cohesion
- Reduces permeability by limiting capillary pore formation

FIELDS OF APPLICATION

Chryso®WRDA 90 is suitable for:

- Ready-mixed concrete
- General concrete construction
- Cement-based grouts

The product is compatible with most Portland cements and is effective in concretes containing fly ash or ground granulated blastfurnace slag (GGBS).

Chryso®WRDA 90 is compatible with Chryso admixtures commonly used in concrete production.

- Each admixture must be added separately
- The presence of other chemicals may affect performance

Consult Chryso Technical Services where combined admixture systems are used.

INDICATIVE INFORMATION

Product Nature	Liquid
Color	Dark brown
Lifetime	12 months
Equivalent Content Na ₂ O	≤ 2,50 %
Specific gravity	1,190

METHOD OF USE

Dosage :

Typical dosage range:

- **300 – 800 ml per 100 kg of cement**
- Equivalent to **0.30 – 0.80%** by weight of cement

As a guide for initial trials, an addition rate of **0.40 – 0.50%** by weight of cement is recommended. Optimum dosage depends on mix design, materials, and required performance.

Chryso®WRDA 90 is supplied ready for use.

- Add the admixture with part of the batching water after the addition of cement
- After addition, a further mixing cycle of **at least two minutes** is recommended to ensure uniform dispersion

Automatic dispensing equipment is recommended for accurate and consistent dosing.

PRECAUTIONS

- Protect from frost.
- Protect from air, humidity and light.

SAFETY

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

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Air Entrainment

1.0%

PACKAGING

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

ADDITIONAL INFORMATION

Increasing dosage within the recommended range will increase concrete consistence and retardation of set. These effects may be more pronounced when using cement replacement materials or in cold weather.

Accidental overdosing outside the recommended range may lead to extended setting times, particularly in cold conditions. Provided the concrete is correctly cured, ultimate strength is typically equal to or greater than normally dosed concrete. Suspected overdosing should be assessed in the plastic state, with attention to consistency and cohesiveness.