

CAPLAST SUPER-R / SPECIAL

A HIGH RANGE WATER REDUCING, RETARDING & SUPER PLASTICIZING CONCRETE ADMIXTURE

DESCRIPTION

CAPLAST SUPER-R / SPECIAL is a high range, super plasticizing and water reducing admixture, which improves pumpability and stability of the fresh concrete.

FEATURES

CAPLAST SUPER-R / SPECIAL drastically increases the workability of concrete mix by powerful deflocculating and dispersing action on the cement particles. The increase workability is useful to produce high workability concrete or to enable significant reduction in the free water content, thereby attaining increased compressive and flexural strengths.

STANDARDS

CAPLAST SUPER-R / SPECIAL complies with the specifications of ASTM C-494 Type G.

USES

- Production of rheoplastic or self-compacting concrete.
- Production of high early strength concrete.
- Hot weather concreting.
- Mass concrete pour.

ADVANTAGES

- The powerful plasticizing property of CAPLAST SUPER-R / SPECIAL drastically increases workability such that a concrete of slump 60 to 80m.m. can be modified to a self-compacting, flowing concrete.
- High range admixture, which can be used as a conventional plasticizer through super plasticizer.
- High strength mixes can be produced at normal workability and cement contents, due to substantial reduction in free water content.
- When used to increase workability, it extends the set time period of concrete that can be

successfully placed and compacted, which is of particular benefit in hot climatic condition.

- Surface finish will be improved and sand runs and blemishes will be reduced.
- Enables production of economical, dense and impermeable concrete.
- Minimum thermal peak.

TYPICAL PROPERTIES

Appearance:

Dark brown liquid

Specific gravity:

1.180 at 25°C

Chloride content:

Nil to BS 5075.

Air entrainment:

Complies with requirements of ASTM C-494 clause 12.2.1

Toxicity:

Non toxic.

Compatibility with cement:

CAPLAST SUPER-R / SPECIAL can be used with all types of Portland cement. It can also be used in mix designs containing fly ash, microsilica and other cement replacement materials.

Compatibility with other admixtures :

Compatible with other Ahlia admixtures, provided they are added separately to the mix.

Shelf life:

At least 18 months if stored in tightly closed containers at normal ambient temperature.

DIRECTIONS FOR USE

CAPLAST SUPER-R / SPECIAL is supplied ready for use. It should be added to concrete mixes during mixing process preferably at the same time along with mix water. It should not be added directly to the cement as this will effect its performance. It can also be added to a normal concrete mix in its supplied form, a few minutes prior to the commencement of pour.

Dosage:

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Field trials should be conducted to determine the optimum addition rates of CAPLAST SUPER-R / SPECIAL using the relevant mix design. The following guidelines will provide a starting point for trials in the following applications.

- 0.3 liter to 0.6 liter per 50 kg of cement to regulate plasticizing effect and reduction in water content of mix.
- 0.7 liter to 1.0 liter per 50 kg of cement to produce flowing, self compacting concrete with high water reduction.

The dosage rates given are a guideline for use. Applications requiring a dosage rate outside these guidelines are not uncommon.

Dispensing:

Best by dispenser into the gauging water or directly with water into the mixer.

Overdosing:

An overdose of double the recommended dose will result in the following.

- Retardation of initial and final set.
- Slight increase in air entrainment.
- Increase in workability.

Provided if properly cured, the ultimate strength of concrete will not be adversely effected.

SAFETY PRECAUTIONS

CAPLAST SUPER-R / SPECIAL is non-toxic and non-flammable. Splashes to eyes and skin should be washed off immediately with abundant water. It is advisable to use goggles and gloves while handling CAPLAST SUPER-R / SPECIAL.

PACKAGING

CAPLAST SUPER-R / SPECIAL is supplied in bulk (by arrangement), 205 liter barrels and 20 liter pails.

STORAGE

Preferably store in sealed conventional containers, protected from extreme weather conditions.

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TECHNICAL SERVICE:

Our Technical Service Department is available at any time to advise you in the correct use of this product or any other Ahlia products.

Note : The information presented herein is based on the best of our knowledge and expertise for which every effort is made to ensure its reliability. Although all the products are subjected to rigid quality tests and are guaranteed against defective materials and manufacture, no specific guarantee can be extended because results depend not only on quality but also on other factors beyond our control.

As all Ahlia Technical Data Sheets are updated on a regular basis, it is the user responsibility to collect most recent issue.