

SP311

Concrete Admixture With High Range of Workability



DESCRIPTION

S.S. SP311 is formulated from selected polymers specially designed to enable the water content of the concrete to perform more effectively. This effect can be used to improve workability, to increase ultimate strengths or to facilitate a reduction in the cement content while sustaining mix properties.

S.S. SP311 has strong workability retention which helps in long distance and hot weather concrete deliveries, and is particularly suitable for ready-mix concrete.

APPLICATIONS

- Long distance and hot weather concrete deliveries.
- Where high workability retention and retardation are of prime importance.
- To produce high quality concrete of improved durability and water tightness.

CHARACTERISTICS

Appearance	Brown Liquid
Specific Gravity	1.17 ± 0.02
Freezing Point	= 2oC
Cl- Content	Nil

ADVANTAGES

- Higher strength with same cement content.
- Minimising segregation problems by improving cohesion.
- Excellent slump retention properties.
- Improved workability reduces placing and compaction problems.
- Cold joints can be avoided by extending initial and final concrete setting time.
- Saving cement without affecting strength specifications.
- More durable concrete by considerable reduction in permeability.

COMPATIBILITY

SP311 can be used with all types of Portland cement and cement replacement materials. S.S. SP311 is compatible with other CCC admixtures used in the same concrete mix. If more than one type of admixture will be used in the concrete mix, they must be dispensed to the concrete separately

STANDARDS

S.S. SP311 complies with ASTM C494, Type B, D and G, depending on the dose.

METHOD OF USE

S.S. SP311 should be added to the concrete with the mixing water to achieve optimum performance. An automatic dispenser should be used to dispense the correct quantity of S.S. SP311 to the concrete mix.

DOSAGE

The guidance dosage is between 3 – 0.80 litre/100 kg of cementitious materials in the mix, including GGBFS, PFA or microsilica.

EFFECTS OF OVER DOSAGE

Over dosing of S.S. SP311 will cause the following:

- Significant increase in retardation.
- Increase in workability.

Ultimate concrete strength will not be adversely affected and will generally be increased provided that proper concrete curing is maintained.

SETTING TIME

Although the setting time is dependent on the dosage of S.S. SP311, the following factors should be considered:

- Retardation is increased with lower levels of tricalcium in the cement.
- Lower temperatures will delay the setting time.
- Using more than one type of admixture in the same concrete mix could affect the setting time.
- Retardation level is increased when cement replacement materials are used in the concrete mix.

CLEANING

S.S. SP311 can be washed immediately by cold water.

PACKAGING

S.S. SP311 is available in 25 litre pails, 210 litre drums and 1000 litre bulks supply.

STORAGE

S.S. SP311 has a shelf life of 12 months from date of manufacture if stored at temperatures between 2°C and 50°C. If these conditions are exceeded, Technical Department should be contacted for advice.

HEALTH AND SAFETY

S.S. SP311 is not classified as hazardous material.

S.S. SP311 should not come into contact with skin and eyes. In case of contact with eyes wash immediately with plenty of water and seek medical advice promptly. For further information refer to the Material Safety Data Sheet.

FIRE

S.S. SP311 is nonflammable.