

## Green SP 860

### HIGH RANGE WATER-REDUCING AND SLUMP RETAINING CONCRETE ADMIXTURE

#### Description

Green SP 860 is a naphthalene sulphonate-based admixture that improves the properties of concrete. It increases workability and reduces the amount of water needed in concrete mixtures. This leads to higher strengths in both plastic and hardened concrete, as well as improved durability. The admixture is used in applications requiring high plasticity, normal setting times, and accelerated strength development, such as precast concrete.

#### Properties:

- Substantial improvement in workability without increased water or the risk of segregation
- As a Water Reducer: Early strengths significantly increased, high ultimate strengths and up to 20% water reduction

#### Usage

Green SP 860 can be used as a superplasticizer for the production of free-flowing concrete for:

- Slabs
- Foundations
- Slender components with densely packed reinforcement
- Piles
- Walls
- Columns
- Piers
- Fiber reinforced concrete

Green SP 860 is also used as a water-reducing agent leading to high early strength concrete such as:

- Pre-cast concrete elements
- Pre-stressed concrete
- Bridges and cantilever structures

#### Advantages

Green SP 860 provides the following properties:

As a superplasticiser:

- Concrete requires less vibrating
- Improved cohesion of the concrete mix significantly reduces the risk of segregation and allows greater time for placement.
- Workability is greatly improved
- Concrete is placed easily
- Especially suitable for narrow shaped components with densely packed reinforcement

As a water reducer:

- Impressive water reduction capability

200 Litre or 250 Kg  
Bulk supply in tanker trucks possible on request

### Colour:

Dark Brown liquid

### APPROVALS / STANDARDS

Green SP 860 follows the requirements of ASTM C494; Type F

### Chemical Base

Sulphonated naphthalene

### Shelf Life

12 months from date of production if stored properly

### Storage Conditions

Store in undamaged, unopened, original sealed packaging in dry conditions at temperatures between +5 °C and +45 °C.

Protect from direct sunlight and frost.

### Specific gravity

~1.225 kg/l (+25 °C)

### Total Chloride Ion Content

Nil

### Compatibility

Green SP 860 may be combined with all types of Portland cement (OPC and SRC), and may be used for concretes containing pozzolanic materials such as micro-silica.

## Mixing

Green SP 860 is added to the gauging water or simultaneously poured with it into the concrete mixer at the batching plant.

Do not add Green SP 860 directly to the dry mix.

For optimum utilization of its high water reduction property we recommend thorough mixing at a minimal wet mixing time of 60 seconds.

The addition of the remaining gauging water (to fine tune concrete consistency) may only be started after two-thirds of the wet mixing time to avoid surplus water in the concrete.

## Recommended Dosage

0.8 to 2.5% by weight of binder.

Higher or lower dosages by weight of binder can be used depending on the mix design, raw materials, climatic conditions and concrete requirements.

The use of the recommended dosage does not imply that compliance with the standards will be met over the whole range.

Trial tests should be carried out with the materials to be used on site to find the dosage necessary to achieve the required result.

## Toxicity

Non-Toxic

## Transportation

Non-Hazardous

## Ecology

Do not drawn directly to water or land.

## Precautions

Use rubber gloves and safety glasses while handling. Is case of contact with skin and eyes use plenty of fresh water or consult doctor.