

CIKOflow SPH

High range water reducing and retarding super plasticizer

Description

CIKOflow SPH is a high range water reducing and retarding concrete admixture suitable for the production of high strength concrete with low water-cement ratio. It exhibits good workability retention especially at high ambient temperatures.

CIKOflow SPH consists of a blend of selected synthetic organic polymers in water along with other ingredients. It increases the dispersion of cement particles and enables the water content in the concrete to perform with maximum efficiency.

Properties

- Provides high range water reducing property with excellent workability
- Suitable for high strength and high cement content concrete
- Eliminates segregation and bleeding problems and improves surface finish
- Reduction in heat of hydration in mass concrete
- Reduction in permeability, yielding durability

Application area

CIKOflow SPH is suitable for all kinds of high strength and high cement content concrete. Typical application includes

- Piling and mass concrete pours
- High strength ready-mix concrete for long distance pours.
- Suitable for hot weather concreting

Applicable standards

- CIKOflow SPH complies with ASTM C-494 type G and BS EN 934-2.
- Comply with Qatar Construction Specification QCS.

Physical Properties

| | |
|------------------|---|
| Form | Liquid |
| Colour | Dark brown |
| Specific Gravity | 1.2±0.015 at 25 °C |
| Chloride Content | Nil to BS 5075 |
| Compatibility | Compatible with other CIKO admixtures and all types of cement |
| Air content | Less than 2% |

Dosage

The normal dosage is 0.5 to 2.0 litres per 100kg cement which includes replacements (if any) such as microsilica, GGBFS, and fly ash. In case if the required dosage rate is more than 2.0 litres per 100kg cement, consult CIKO technical service department to customize the solution.

The optimum dosage should be determined by conducting laboratory/site trials considering proposed mix design, ambient conditions and performance requirements.

Usage instructions

CIKOflow SPH is a ready to use concrete admixture. Required/calculated amount of CIKOflow SPH should be measured by means of measuring jar or dispenser, and should be added to concrete during mixing process preferably at the same time along with water.

To attain optimum efficiency of the admixture, it is always recommended to dose CIKOflow SPH to wet concrete mix. This can be done by mixing 70-75% of the total required water with all other ingredients of concrete followed by the addition of CIKOflow SPH diluted with remaining 25-30% water.

NOTE: CIKOflow SPH should not be mixed with dry/lump concrete.

Compatibility with other admixtures

CIKOflow SPH is compatible with other CIKO range of admixtures provided each admixture is dispensed separately into the concrete. Site trials should be conducted to obtain optimum dosage. Contact CIKO technical service department for any further information.

Packaging

CIKOflow SPH is available in 200 litre drums and in 1000 IBC tank.

Shelf Life

CIKOflow SPH has a minimum shelf life of 12 months if stored in accordance with CIKO instructions.

Storage

CIKOflow SPH should be stored under enclosed shaded area.

Precautions

- Dosage shall not be more than the maximum limit

Effect of over dosage:

Over dosage to the extent of double the recommended dosage of CIKOflow SPH will result in increased retardation and workability. The retardation effect will be more in case if sulphate resistant cement and cement replacement materials are incorporated in the mix. Increase in retardation will not affect the ultimate strength of concrete if it is cured as per the standard curing practices in accordance with relevant standards.

Health & Safety

CIKOflow SPH should not come in contact with eyes or to be swallowed. If comes in contact with eyes, flush with plenty of fresh water and seek medical advice.

CIKOflow SPH is water based material and non-flammable.

Refer Material Safety Data Sheet for further details.

Technical Support

For any technical support, do not hesitate to contact CIKO team at any time as CIKO offers on and off site services to end users, specifier and contractors.

More from CIKO Middle East

A wide range of construction chemical products are manufactured by CIKO Middle East which includes:

- Concrete admixtures and additives
- Waterproofing and damp proof coatings
- Surface treatments
- Flooring and toppings
- Grouts and anchors
- Tile adhesives and grout
- Concrete repair materials
- Adhesives and bonding agent
- Protective coating
- Joint Sealants and Moulding compounds
- Ancillaries

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Note: The information presented herein 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

