



# **CIKOflow SPM**

# Super plasticizer for high strength cast-in-situ concrete

### **Description**

CIKOflow SPM is high range water reducing and super plasticizing concrete admixture. It is most suitable for concrete mixes with low water cement ratio and high strength cast-in-situ concrete. It exhibits excellent initial workability at high ambient temperatures.

CIKOflow SPM is a blend of selected synthetic organic polymers and other speciality additives in water. It increases the dispersion of cement particles and enables the water content in the concrete to perform with maximum efficiency.

# **Properties**

- Provides high range of water reducing property with higher workability levels.
- Suitable for high strength and high cement content concrete.
- Eliminates segregation and bleeding problems
- Reduction in permeability, yielding durability

#### **Application area**

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

- · Precast and GRC industries.
- Production of high strength ready-mix concrete.
- Suitable for hot weather concreting

#### Applicable standards

- CIKOflow SPM complies with ASTM C-494 type F and BS EN 934-2 Table 3.1.
- Comply with Qatar Construction Specification QCS.

# **Physical properties**

Form	Liquid
Colour	Pale Yellow
Specific Gravity	1.1±0.015 @ 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 1.0 to 2.0 litres per 100kg cement which includes replacements (if any) such as microsilica, GGBFS and fly ash.

The optimum dosage should be obtained by conducting site/laboratory trials considering all variables.

#### **Application instructions**

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

To achieve higher efficiency of the admixture, it is always recommended to dose CIKOflow SPM 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 SPM diluted with remaining 25-30% water.

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

#### Compatibility with other admixtures

CIKOflow SPM is compatible with other CIKO 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 further information.



## **Packaging**

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

#### Shelf life

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

#### Storage

CIKOflow SPM should be stored under enclosed shaded area.

## **Precautions**

Dosage shall not be more than the maximum limit

#### Effect of over dosage:

Over dosage of double the recommended dosage of CIKOflow SPM will result in increased retardation and air entrainment in the concrete. The retardation effect will be more in case if resistant cement and cement sulphate replacement materials are incorporated in the mix. Increase in retardation will not affect the ultimate strength of the concrete, provided concrete is cured as per standard curing procedures in accordance with relevant standards.

#### **Health & safety**

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

CIKOflow SPM is water based material and nonflammable.

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**

TDS/AD18 Rev.:1 Issue:C

Note: The information presented herein based on the best of our knowledge and expertise for which every effort is made to ensure its