

## **K CRETE SPR 14** **HIGH RANGE WATER REDUCER** **AND RETARDING PLASTICIZER**

### **DESCRIPTION**

K CRETE SPR 14 is a high range water reducing agent and retarding plasticizer for concrete. K CRETE SPR 14 is supplied as brown liquid based on modified sulphonated Nephthalene slump retainer Plasticiser. The powerful dispersing agent of the high range water reducing super plasticizer can be used in many ways to obtain dense, high strength durable concrete (M35, M40, M45 M50). The high water reduction properties makes of K CRETE SPR 14 an ideal application in precast concrete where high early strength is of paramount importance. K CRETE SPR 14 is chloride free.

**INCREASES WORKABILITY :** K CRETE SPR 14 when incorporated in concrete mixes increases the workability without the risk of segregation and bleeding. K CRETE SPR 14 also retains the slump for much longer time which facilitates easy placement.

**INCREASES STRENGTH :** K CRETE SPR 14 can be used to reduce water content transportation and for a given workability which leads to increased early and ultimate (28 days) strength. Such a high early strength facilitates early removal of formworks.

**Conforms to:BS 5075 Part-3 ,ASTM C-494 Type G and IS 9103, 1999.**

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### **USES**

To produce high strength and flowing concrete without an additional water. Enables high water reduction to achieve high early and 28 days strength. Ideal with higher grade of concrete mix, pre stressed and precast work, pavement concrete, exposed slab concrete, mass concrete pours.

### **ADVANTAGES**

Increased strength at early ages.

- High elastic modulus.
- Retains the initial workability for longer time.
- Shorter placing times

- Can be used with higher grade of concrete.
- Safe in prestressed concrete.
- Improves cohesion thus aids pumping of concrete.
- Makes the concrete denser, hence durability increases.
- High water reduction is possible.
- Chloride free.
- Ideal for mass concreting, pavement concrete.

### **DOSAGE**

**200 ml to 600 ml / 50 kg of cement, however, the optimum dosage, should be determined by site trials.**

### **PACKING**

**1, 5, 10, 50, 100, 200 kg carboys.**

### **PROPERTIES**

Physical State : Brown liquid. Chloride content : Nil as per BS 5075, Air entrainment : Less than 1% additional air entrained. Specific Gravity : 1.24 + 0.015. pH Value : 7.5 + 0.5.

K CRETE SPR 14 can be used with all types of Portland cements and is chloride free. The normal dosage is 200ml to 700ml per 50 kg of cement. However higher dosages can be used with suitable changes in the mix, especially sand to avoid segregation if no water reduction is made.

Overdosing upto double the normal dosage levels may lead to excessive retardation of setting time, and may tend to segregate and produce ultra fluid concrete.

Typical results with use of K CRETE SPR 14 M40 grade of concrete

1) 0.45 w/c ratio ; 2) 53 grade cement ; 3) Washed clean graded 20 mm and 10 mm Agt. ; 4) Sand zone II

### **SHELF LIFE**

12 months storage life when stored in original unopened container at between 5 °C to 45 °C in a dry and shaded place.

### **HEALTH & SAFETY**

KCRETE SPR 14 is non-hazardous. It should not be swallowed or allowed to come into contact with skin or eyes. Suitable protective goggles and gloves should be worn. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If swallowed, seek medical attention immediately, do not induce vomiting.

**NOTE**

All information is given in good faith on the results gained from experience and tests. However, all recommendations or suggestions are made without guarantee since we don't have any control on site conditions and its uses.