

**Construction Chemical Manufacturers** 

Committed to Superior Quality & Results

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# PRODUCT INFORMATION: CEMWET SP - 3000 (PCE-3)

# (FOURTH GENERATION HIGH EARLY STRENGTH SUPER PLASTICIZER)

# **DESCRIPTION :**

**CEMWET SP-3000 (PCE-3)** is a new generation Super Plasticizer having high molecular weight. The product is polycarboether based product, which allows mixing water to be reduced considerably maintaining slump of concrete for long period of time as compared to Normal Naphthalene and Melamine polymer condensates. The product is high quality control and is provided with performance assurance certificate when ever required.

#### PRIMARY USES.

- (1) In concrete mixes, that are workable with less water for achieving high strength and high performance concrete.
- (ii) Suitable for high volume fly ash concrete
- (iii) Improves performance of low water cement ratio concrete and its slump retention is increased to more than
- (iv) one hour.
- (iv) Suitable for OPC and PPC Cements
- (v) Excellent performance in concrete mixes used for bridges, high rise building, Off shore and marine structures, pre-cast and pre-stressed structures tunnels etc.

# SPECIALITY

CEMWET SP-3000 (PCE-3) develops early strength in 12 to 14 hrs

**CEMWET SP-3000 (PCE-3)** disperses cement particles and can maintain slump of concrete for more than one hour without affecting early development of strength.

**CEMWET SP-3000(PCE-3)** satisfies ASTM C-494 Type-G and IS 9103-99 at normal Dosage. Due to high water reduction capacity all the properties of hardened concrete are improved significantly, namely permeability, shrinkage, creep, workability & modulus of elasticity.

**CEMWET SP 3000(PCE-3)** is compatible with all types of cements such as OPC, PPC and Pozzolana, High Alumina Cement, Slag Cement

# DOSAGE :

Recommended dosage is 0.3% to 2.5% by wt. of cement. However accurate dosage can be determined after laboratory trials for a particular concrete mix design.

#### PACKING

200 Kg drums. Bulk deliveries in tankers are available on request.

TYPICAL PROPERTIES	
Color	: Light Yellow
Specific Gravity	$: 1.10 \pm 0.020$
Chloride Content	: NIL to BS 5075, to IS 456-2000
Air Entertainment	: Maximum 1.5% of Control as per IS: 9103-99
Water Reduction	: More than 30%
Flow Characteristics	: Only a small amount of additive is needed to improve the flow of concrete. At low
Of Fresh Concrete	water to cement ratio, the concrete is capable to flow and remains mobile normally
	one to two hours without adding any more water or additives.

Compressive Strength : By designing concrete mixes admixed with the admixture and water reduction up to 30% and cement content ranging from 180 to 450 Kg/m<sup>3</sup>, it has been possible to retain slump of concrete up to one hour and achieve high early and long term strength. However, the composition of cement, type and grading of sand, dosage of the admixture and the water reduction are the important factors that play part in designing the concrete mixes and should be considered for achieving plasticity, durability and high strength of the concrete.

# **EFFECTS OF OVER DOSAGE :**

- (I) Retardation of initial and final set
- (II) Slight increase in air entrainment
- (III) Increase in workability

#### **SAFETY PRECAUTIONS:**

CEMWET SP-3000 (PCE-3) contains no hazardous substances.

#### **STORAGE :**

**CEMWET SP-3000 (PCE-3)**, in tightly closed original contains, has a shelf life of at least 2 years. The product must be stored in a place where temperatures do not drop below + 5°C. If the product has frozen, thaw and agitate until completely reconstituted.



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PRICE, PERIOD OF DELIVERY AND TERMS OF BUSINESS ON REQUEST