# **CHEMITO SIGMA FLOW 3300**

High range water reducing concrete admixture based PCE technology.



## **DESCRIPTION:**

CHEMITO SIGMA FLOW 3300 is A specially designed PCE based Superplasticizer to Imparts very high workability, improved workability retention and allows a large reduction in water content.

CHEMITO SIGMA FLOW 3300 combines the properties of high-water reduction and workability retention. It allows the production of high-performance concrete and/or concrete with high workability

## **STANDARD COMPLIANCE:**

CHEMITO SIGMA FLOW 3300 complies with IS9103:1999, BS Prestressed concrete 5075 Part 3 and with ASTM C494 Type G admixture depending on dosage used.

## **DOMAINS OF APPLICATION:**

- superplasticizer intended for applications where . high-water reduction and long workability retention are required, and it has been developed for use in:
  - Especially suitable for concrete mixes with 0 extended workability requirements as well as improved flow characteristics.
  - High performance concrete. 0
  - High strength concrete. 0
  - Prestressed concrete. 0
  - Pumped concrete. 0
  - Suitable for a wide range of applications with 0 high or low W/C and /or high or low environment temperatures.

### ADVANTAGES:

- Admixture suitable for pumping different grades of concrete to greater heights.
- Provides higher strength without increase in cement content or reduction in workability.
- Produces a more uniformly cohesive high quality free flowing concrete.
- Improved dispersion properties. .
- Very high-water reduction more than 35% • depending on dosage used.
- Improved durability.
- Improved cohesion & rheology properties. •
- Improved flowability. •
- Reduced drying shrinkage.
- Improved workability retention. •

### HANDLING:

CHEMITO SIGMA FLOW 3300 is formulated from chemicals, which present no fire or health hazards.

## CHARACTERISTICS:

CHEMICAL BASE	: Polymer type dispersion
APPEARANCE	: light Brown Liquid
SPECIFIC GRAVITY	: 1.09±0.02
AIR ENTRAINMENT	: $\leq$ 1.5 % over control mix.
рН	: Min 6.0
Chloride Content	: Nil, as per BS - 5075 (Part- I)

## **METHOD OF USE:**

DISPENSING: CHEMITO SIGMA FLOW 3300 should be added to the mixing water only. Should the product be added to fresh concrete, into the mixing truck, it is necessary to mix at high speed, and then at low speed (with a minimum 3 minutes at each speed).

**DOSAGE:** Optimum dosage can only be established after trials, considering the rheological characteristics and the required mechanical performances. Rate of addition is generally in the range of 0.4-2.0% by wt. of cementitious material. For maximum dispersion throughout the mix.

\*\* Higher dosage can be used if agreed & allowed by clients/consultants

LIMITATIONS: Excessive water addition or overdosing may cause bleeding or segregation. If frozen and / or if precipitation has occurred, CHEMITO SIGMA FLOW 3300 may be used after thawing slowly at room temperature and after intensive mixing.

#### PACKAGING & STORAGE:

- CHEMITO SIGMA FLOW 3300 is available in the following pack:
  - 250 kg HDPE container 0
- Shelf life is 12 months from date of production if stored properly in undamaged, unopened, original sealed packaging, in dry conditions at temperatures between +5°C and +30°C
- Freezing point: Approximately -2°C.
- Keep containers sealed and away from heat and cold in a well-ventilated area
- Protect from direct sunlight and frost
- Stir material well before use

### **HEALTH & SAFETY:**

- Protect hands with rubber gloves and eyes with goggles.
- This chemical is harmless to human body.
- Accidental splashes to the skin or eyes must be rinsed immediately with clean water.
- Store in well-labeled containers.
- Non dangerous goods, please observe Material Safety datasheet.