

CONXL - PCE DM 108 (FS) 01

PRECAST CONCRETE SUPERPLASTICIZER FOR FAST SETTING

DESCRIPTION AND MECHANISM OF SUPERPLASTICIZATION

CONXL PCE DM 108 (FS) 01 is a high-range water-reducing admixture for high performance, high strength and durable concrete. It is based on a Polycarboxylate Ether (PCE) Polymer. It has been developed for the production of concrete with high early strength and excellent workability requirements.

BENEFITS AND ADVANTAGES

- Excellent workability and flow behaviour.
- Significantly increase strength development between 6 and 24 hours.
- Strong plasticizing effect with low dosage.
- Easy finishing.
- Very good surface appearance after removal of formwork.
- Compatible with ordinary Portland as well as slag and fly ash blended cements.
- It is ideal for pre-stressed concrete and precast concrete products like paver blocks, designer concrete tiles, solid and hollow blocks, etc.
- Self-leveling concrete without efflorescence.
- Faster turn-around of formwork, higher output.
- Reduction of cement content or increased use of economic cementitious materials.
- Reduction of energy consumption.
- Earlier achievement of release strength enables earlier transportation of precast elements.

CHEMICAL PROPERTIES

Appearance	:	Clear to light yellowish
Specific Gravity	:	1.08
pH value	:	8 ±1
Solid Content [%]	:	38 ± 2
Chloride content	:	0.014 IS:9103-1999 IS 6925-1973 (Reaffirmed 2013)
Solubility	:	Water soluble

STANDARDS

CONXL PCE DM 108 (FS) 01 conforms to ASTM C 494 Type A and Type E and complies with IS: 9103 - 1999.

DOSAGE

Range: 150 ml - 1200ml per 100 kg cement.
(0.15 % to 1.2 % [v/w])

As with most commodity concrete additives, the efficiency obtained by the use of CONXL PCE DM 108 (FS) 01 is dependent on dosage, water-to-cement ratio, the nature of constituent materials such as cement, fly ash and ground-granulated blast-furnace slag. The type of cement, its fineness and the C3A (tricalcium aluminate) content are important parameters that influence the performance of the chemical admixture. It is therefore necessary to assess the performance of concrete in its conditions of placing to arrive at optimum dosage of CONXL PCE DM 108 (FS) 01 to ensure desirable plastic and hardened concrete properties.

COMPATIBILITY WITH CEMENT

CONXL PCE DM 108 (FS) 01 can be used with all types of OPC, Composite Cement (PSC and PPC), Silica Fume, Metakaolin, Rice Husk Ash (RHA), Pulverized Fuel Ash (PFA) and Ground-Granulated Blast-Furnace Slag (GGBFS).

MATERIAL SAFETY DATA

CONXL PCE DM 108 (FS) 01 is made from chemicals which present no fire or health hazard. However, in case of spillage, washing with water is adequate. Eye / skin contact should be avoided.

STORAGE AND SHELF LIFE

To be stored away from heat and frost. Best before 12 months from the date of manufacture.

PACKING

50 kg and 230 kg HDPE drums. Small and Bulk packing on request.

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