



# STERLING ConFlow® PC 7157

## High-Performance Low Viscosity PCE Based Admixture

### Description:

Sterling ConFlow® PC 7157 is a new generation admixture based on the latest generation polycarboxylic ether polymer with high early strength gains, with long side chains and short main chains specially designed to enable the water content of the concrete to perform more effectively. This effect can be used to greatly improve cement dispersion and as well as facilitate the quick start of the hydration process. At the start of the mixing process, an electrostatic dispersion occurs but the cement particles capacity to separate and disperse. This mechanism considerably reduces the water demand in flowable concrete.

Sterling ConFlow® PC 7157 is designed to be used for high early strength required even in cold weather, without affecting the setting mechanism of Concrete. It is free of chloride & low alkali and compatible with all types of Portland and slag cements including sulphate resisting cement and Pozzolans, e.g., Microsilica, fly ash, GGBFS, etc. Sterlin ConFlow® PC 7157 conforms to IS: 9103-1999 (revision 1), ASTM C494/C494 M-10, Type F & A, & BS 934.

### Usage:

- Moderate workability retention concrete.
- Suitable for Self-compacting concrete.
- High performance concrete.
- High early strength.

### Features & Benefits:

- Low viscosity admixture suitable for precast elements
- Suitable for concrete having cement replacements and low water cement ratio.
- Provides high early strength without increase in cement content or reduction in workability. Ideal for precast concrete production
- Early de-shuttering will result in increased productivity.
- Improves surface finish
- Minimizes damage due to early handling
- Better resistance to Carbonation.
- Reduces Shrinkage and Creep
- Reduces efflorescence.

### Typical Properties At 25°C:

Appearance:	Light brown or Pale Yellow liquid
Specific Gravity IS 9103:2007	1.05 ± 0.02 at 25°C
Chloride Content:	< 0.2%
PH Value:	> 6 at 25°C
Standard:	Complies with IS: 9103-1999 (revision 1), ASTM C494/C494 M-10, Type F & A, & BS 934.
Compatibility:	Can be used with all types of Portland and slag cements including sulphate resisting cement and Pozzolans, e.g., Micro silica, fly ash, GGBFS, etc.

\* The uniformity parameters like specific gravity, pH, chloride content etc. will vary for specific site requirements and mix design. Please refer to our MTC issued for specific product configuration for measuring our product parameters that will be constantly and consistently administered.

### Instructions & Usage:

Sterling® ConFlow® PC 7157 is supplied ready for use. For maximum dispersion throughout the mix, measured quantity of Sterling® ConFlow® PC 7157 should be added directly into the mixer at the same time as the mixing water. Sterling® ConFlow® PC 7157 Admixture should not be added to the dry cement or mix.

### Dosage:

The optimum dosage of Sterling® ConFlow® PC 7157 to meet specific requirement should always be determined by site trial with the particular concrete mix using the materials and conditions that will be experienced in use. As a guide, a dosage range of 0.5% to 2% per 100kg of cementitious material is recommended. This dosage range applies for most concrete mixtures using typical concrete ingredients. However, variations in job conditions and concrete materials, such as silica fume, may require dosages outside of the recommended range.

### Effects Of Overdosing:

- Significant increase in retardation.
- Increase in workability.
- The ultimate concrete strength will not be adversely affected and will generally be increased provided that proper concrete curing is maintained.

### **Packaging:**

Sterling ConFlow® PC 7157 available in 225 Kg HDPE plastic container.

### **Storage & Shelf Life:**

Sterling ConFlow® PC 7157 must be stored within moderate temperature, under cover, away from direct sunlight. The shelf life is 12 months from the date of production under suitable storage conditions.

### **Consistency:**

Sterlin ConFlow® PC 7157 is formulated from carefully selected raw materials and is manufactured under controlled strict quality condition to produce a consistent product.

### **Fire:**

Sterling ConFlow® PC 7157 is a water-based product and non-flammable.

### **Cleaning:**

Spillage of Sterling ConFlow® PC 7157 should be absorbed onto sand, earth or vermiculite and transferred to a suitable container. Remnants should be hosed down with a large quantity of water. The disposal of excess or waste material should be carried out in accordance with local legislation under the guidance of the local waste regulatory authority.

### **Technical Support:**

Techno Builders Solutions® By Sterling Technotrade provides technical advisory service for on-site assistance and advice on mix design, admixture selection, evaluation trials and dispensing equipment.

**Additional Information:** Techno Builders Solutions® By Sterling Technotrade India Pvt.Ltd -The Specialist Construction Chemicals Company® range of associated products includes high performance concrete Admixtures, Adhesives, Protective Coatings, Concrete Repairs, Industrial Flooring, Grouts & Anchors, Joint Sealants, Surface Treatments, curing compounds, repair mortars, release agents, Grinding Aids & Waterproofing.

\*Separate datasheet are available on these products.

### **Health & Safety Instructions:**

Sterling ConFlow® PC 7157 is formulated from chemicals which present no fire or health hazards. Does not fall into the hazard classifications of current regulations. However, it should not be swallowed or allowed to come into contact with skin and eyes. Suitable protective gloves and goggles should be worn. Store all materials and equipment safely and out of reach of children and animals. Observe container labels, SDS, applicable laws and regulations and all instructions before using the product and equipment. In case one of the components comes in contact with the skin, wash thoroughly with soap and water. Provide adequate ventilation in volume and pattern in working area.

\*Further protection: Emergency showers and eyewash stations. Get immediate medical attention as needed.

**Disclaimer:** The product information & application details given by the company & its agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure on the suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of other materials used and the on-site workmanship are factors beyond our control, there are no expressed or implied guarantee / warranty as to the results obtained. The company does not assume any liability or consequential damage for unsatisfactory results, arising from the use of our products.

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