

## TDS

### [TECHNICAL DATA SHEET]

### STC PC 50% LIQ.

#### 1. About Product:-

- ✓ STC PC 50 % LIQ (HWRES) is a high range water reducing and accelerating admixture. It gives high early strength.
- ✓ STC PC 50 % LIQ (HWRES) is new generation superplasticizer containing carboxylic (COOH) group instead of sulphonic (SO<sub>3</sub>H) as in case of Melamine or Naphthalene Formaldehyde Sulphonate.

**2.Nature:** Synthetic Polycarboxylic Ether.

<b>3.Specification</b>	Appearance	:	Pale yellowish to brown colored liquid
	pH value (As such)	:	5.0 to 6.0
	Solubility	:	Readily soluble in water
	Solid	:	51 ± 0.5%
	Specific Gravity	:	1.108 ± 0.04
	Chloride content	:	Below 0.02 %

#### 4. Properties:

- ✓ The power packed (COOH) moiety is absorbed on hydrating cement grain in much greater amount than conventional **super plasticizer**, resulting excellent fluidity and yielding a Rheoplastic & Self Compacting Concrete (RCC) at low water cement ratio.
- ✓ Due to steric-hindrance effect imparted by ether-function hydrophilic grafted chain attached to polymer, superior slump (workability) retention is achievable by use of STC PC 50 % LIQ (HWRES). STC PC 50 % LIQ (HWRES) is compatible with all of PCE products. STC PC 50 % LIQ (HWRES) is compatible with lingo base plasticizer. Do not use blending with SNF base plasticizer.

**Advantage:**The advantage of STC PC 50 % LIQ (HWRES) are as below,

- ✓ High water reducing ability.
- ✓ Improvement early strength.
- ✓ Improve concrete setting time.
- ✓ Increase compressive and flexural strength of concrete at all ages.
- ✓ More than 40 % water reduction in high performance concrete.
- ✓ Linear water reduction throughout the recommended dosage.
- ✓ Faster recycle of formwork owing to accelerated early strength development.

**Dosage:** 0.2 to 1.0 kilograms/100 kilograms cementitious material for most concrete mixes using typical concrete ingredients. However for silica fume concrete, the dosage may fall outside recommendation and site trials in case of critical **workability and setting time parameters** as per requisites to fix optimum dosage. To be mix with water and added to cement aggregate mixture. The best formulation should make on site after completing enough tests.

**Packing:** STC PC 50 % LIQ (HWRES) is available in 225 kg HDPE drum. Alternative packing may be available upon request.

**Caution:** Do not allow product to freeze or be stored in temperature below freezing.

**Do not mix** STC PC 50 % LIQ (HWRES) to any other products without pilot scale trial.