

TECHNICAL DATA SHEET

[Technical Information]

PCE 50% LIQUID STD

- ✓ **PCE 50% LIQUID (STD)** is a high range water reducing and slump retarding admixture.
- ✓ **PCE 50% LIQUID (STD)** is new generation superplasticizer containing carboxylic (COOH) group instead of sulphonic (SO₃H) as in case of Melamine or Naphthalene Formaldehyde Sulphonate.

1. Nature: Synthetic polycarboxylic Ester.

2. Specification:

- ✓ Appearance : Pale yellowish to brown coloured liquid
- ✓ pH value (As such) : 5.0 ± 1.0
- ✓ Solubility : Readily soluble in water
- ✓ Solid : 50 ± 2%
- ✓ Specific Gravity : 1.110 ± 0.03
- ✓ Chloride content : Below 0.02 %

3. Properties:

- ✓ The power packed (COOH) moiety is absorbed on hydrating cement grain in much greater amount than conventional superplasticizer, resulting excellent fluidity and yielding a Rheoplastic & Self Compacting Concrete (SCC) 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
- ✓ *PCE 50% LIQUID (STD)*. This is compatible with all of PCE products and is compatible with lingo base plasticizer. Do not use blending with SNF base plasticizer.

4. Advantage:

- ✓ High water reducing ability.
- ✓ Improvement slump retention.
- ✓ Produces cohesive and non-segregating concrete mixtures. Increase compressive and flexural strength of concrete at all ages.
- ✓ More than 35 % water reduction in high performance concrete.
- ✓ Linear water reduction throughout the recommended dosages.
- ✓ Faster recycle of formwork owing to accelerated early strength development.
- ✓ Close textured fair faced smooth concrete.
- ✓ Rheoplastic self-leveling and self-compacting concrete.

5. Dosage:

0.3 to 1.2 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 mix with water and added to cement aggregate mixture. The best formulation should make on site after completing enough tests.

6. Packing: PCE 50% LIQUID (STD) is available in 50 KG Carboy – 250 KG HDPE Drums.

7. Caution: Do not allow product to freeze or be stored in temperature below freezing. Do not mix PCE 50% LIQUID (STD) to any other products without pilot scale trial.