

# ShaliPlast<sup>®</sup> PCE 100

High Performance Poly-Carboxylated Ether Based Super-plasticizer



STP Limited

## Description

**ShaliPlast<sup>®</sup> PCE 100** is a poly-carboxylated ether based super-plasticizer for lower and medium grade concrete and mortar. It is an additive for concrete, mortar and plasters.

## Approvals / Standards

Conforms to IS 9103 - 1999 and ASTM - C 494 Type G, IS 2645 - 2003 as an integral waterproofing compound.

## Product Information

<b>Form, Colour</b>	Light Brownish Liquid
<b>Handling &amp; Storage</b>	The material must be stored in a shaded area with no exposure to sunlight and UV. The containers should be protected from all sources of heat and ignition.
<b>Packaging</b>	Available in 225 kg sealed barrel.
<b>Shelf Life</b>	12 months when stored in unopened sealed conditions away from heat and sunlight at 5 to 38°C.
<b>Handling Precautions</b>	The material is non-hazardous, non-flammable and therefore can be disposed of in any regular disposal areas. In case of contact with human skin wash with any soft solvents. Seek medical assistance immediately in case of any allergy.

## Technical Characteristics @ 27°C, 55% RH

Composition	Aqueous solution of poly-carboxylate, co-polymers	Density, gm / cc	1.03 ± 0.03
pH	6 - 8	Chloride Content	Nil
Dosages, by weight of cementitious material, % **	0.5 - 2.0		

\*\* Actual dosage to be finalized on the basis of site trial. Variations in slump loss and setting characteristics are function of the amount of admixtures used; cement characteristics, mix design selected and ambient conditions. An increase in concrete temperature will cause an increase in slump loss and decrease in initial set time.

## Field of Application

**ShaliPlast<sup>®</sup> PCE 100** is especially suitable for the production of concrete mixes which require high early strength development, high water reduction and excellent flow-ability.

- For ready mix concrete.
- High workability concrete.
- Precast concrete.
- Fast track concrete.
- In situ concrete requiring fast stripping time.

## Advantages

- Pronounced increase in the early strength development, resulting in very economical stripping times for precast and in situ concrete.
- Extremely high-water reduction, resulting in high density, high strength and reduced permeability for water etc.
- Excellent plasticizing effect, resulting in improved flow-ability, placing and compacting behavior.
- Higher cohesion reducing risk of segregation and bleeding.
- Improved shrinkage and creep behavior.
- Free from chlorides or other ingredients promoting corrosion of steel reinforcement. It is therefore suitable for reinforced and pre-stressed steel.
- It is compatible with all types of Portland cement including SRC (Sulphate Resistance Cement) and Cement Fillers / substitutes like PFA, GGBFS and Micro Silica. Always conduct trials before combining products in specific mixes and contact our Technical Service Department for information about specific combinations.

## Application Methodology

- Add **ShaliPlast® PCE 100** to the dosing water or added with it in to the concrete mixer. It should not come into contact with dry cement.
- **Dosing:** Charge all concrete material in the proper order into the mixer with about 85% of the mixing water and mix for appropriate time. Add rest quantity of water with admixture to obtain the required slump and mix for additional 2 - 3 minutes.
- Over dosage may cause delay in setting time of concrete.
- **Formwork:** Forms for walls or narrow sections must be watertight, strong and must have good bracing. During the “Flowing period” the concrete will exert a higher pressure at the base of the form than conventional concrete. Form work for slabs is the same as for conventional concrete.

## Value base of product data

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control and different test methods.

## Health & Safety

- Avoid contact with skin / eyes and avoid swallowing.
- Ensure adequate ventilation and a void inhalation of vapour.
- Wear suitable protective clothing, gloves and eye protection.
- In case of skin contact, rinse with plenty of clean water, then cleanse with soap and water. Do not use solvent to clean the contacted area.
- In case of eye contact, wash with plenty of clean water and seek medical advice.
- If swallowed, seek medical attention immediately. Do not induce vomiting.



**STP Limited**  
*Enhancing Structures' Life*

### Product Range

- Waterproofing and Insulation ■ Road Surfacing
- Sealants and Additives ■ Pipeline Coating
- Protective / Anti-Corrosive Coating ■ Epoxy Flooring
- Grouts / Admixtures ■ RestoFix- Repair / Rehabilitation
- Other Construction Chemicals



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