ShaliPlast® PCE 400 H

High performance Poly-Carboxylated Ether Based Superplasticiser & Retarding Agent

STP Limited

Description

ShaliPlast® PCE 400 H is a third generation Poly-Carboxylated Ether based super-plasticizer and retarding agent for concrete and mortar. It is an additive for concrete, mortar and plasters.

It conforms IS 9103 - 1999 andASTM - C 494 Type G.

Characteristics

Colour	Light Brownish	Specific Gravity,	1.10 ± 0.04
pH	6 - 8	Chloride Content	Nil
Dosages by weight of cementitous material, %		0.5 - 1.0*	

**** for concrete of high workability, very low water / cement ratio and for self-compacting concrete 1 - 2 % by weight of cementitous material. 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 and mix design selected. An increase in concrete temperature will cause an increase in slump loss and decrease in initial set time.***

Application

ShaliPlast® PCE 400 H is especially suitable to produce concrete mixes which require high early strength development, powerful water reduction and excellent flow-ability.

- For ready mix concrete.
- High workability concrete.
- Self-compacting 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 powerful 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 suggestion 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® 400 H** to the dosing water or add it into 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 3 - 4 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.

Health & Safety

- Avoid contact with skin / eyes and avoid swallowing.
- Ensure adequate ventilation and avoid 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.

Packing

Available in 225 kg barrel.

Storage

Keep in cool and dry place, under shed, away from heat.

Shelf Life

12 months in original unopened condition.