

ShaliPlast® PCE 300-VM

High Performance PCE Superplasticizer with VMA for SCC



Description

ShaliPlast® PCE 300-VM is a third generation Poly-Carboxylated Ether based super-plasticizer specifically formulated as a Viscosity Modifying Agent (VMA) for concrete and mortar. It is designed to enhance mix cohesion, reduce bleeding, and improve resistance to segregation—ensuring consistent placement and superior stability in high-fluid concrete systems.

This specialized VMA is particularly suited for Self-Compacting Concrete (SCC) and other high-performance mixes where controlled rheology and internal stability are critical. By increasing viscosity without compromising flowability, **ShaliPlast® PCE 300-VM** helps maintain uniformity throughout the mix, even in heavily reinforced sections, and supports smooth, vibration-free placement.

It conforms to IS 9103 : 1999 and ASTM C494 Type 'G' – High Range Water Reducing and Retarding Admixture. It also complies with IS 2645 : 2003 as an integral waterproofing compound.

Technical Characteristics

Colour	Light Brownish	Specific Gravity, 30°C	1.06 ± 0.04
pH	> 6	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 and mix design selected. An increase in concrete temperature will cause an increase in slump loss and decrease in initial set time.*

Field of Application

ShaliPlast® PCE 300-VM is especially suitable for the production of concrete mixes which require high early strength development, powerful water reduction and excellent flow-ability.

- Self Compacting Concrete
- Light weight aggregate concrete
- Lean concrete mixtures
- Fast track concrete.
- Flow and Sprayed concrete
- In situ concrete requiring fast stripping time.

Advantages

- Improves viscosity and thixotropic behavior, ensuring excellent mix stability during transport, placement, and pumping.
- Minimizes bleeding and segregation, even in highly fluid mixes, while maintaining dimensional stability and surface finish
- Delivers powerful plasticizing and water-reducing effects, resulting in improved flowability, compaction, and reduced pump pressure
- Promotes early strength gain, enabling faster stripping times for precast and in-situ concrete applications.
- Reduces permeability and shrinkage, enhances long-term performance, and is compatible with all types of Portland cement and mineral admixtures.
- 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 300-VM** 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 minute. .
- 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 vapor.
- Wear suitable protective clothing, gloves and eye protection.
- In case of contact with skin, rinse with plenty of clean water, then cleanse with soap and water. Do not use solvent to clean the contacted area.
- In case of contact with eyes, wash immediately 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

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

Shelf Life

12 months in original unopened condition.



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Product Range

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



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