

ShaliPlast® AE

Air Entraining Additive For Concrete



STP Limited

Description

ShaliPlast® AE (formerly known as AirMix 200) is an aqueous solution of modified resins used for proper air control under a wide range of temperatures. It is an additive for concrete, mortar and plasters. **ShaliPlast® AE** is specifically formulated for use as an air entraining admixture for concrete of all types and is manufactured under rigid control which assures uniform and precise performance. Air entraining is deliberate infusion of micro-air bubbles spread uniformly across the concrete body for enhancing cohesiveness of concrete mix.

ShaliPlast® AE conforms to specification prescribed in ASTM C-260, ASSHTO M-154 & IS-9103-1979.

Characteristics

Colour	Brown	Specific Gravity	1.00– 1.05
pH Value	7- 8	Chloride Content	Nil

Application

- Ready mixed concrete
- Structural concrete in marine area
- Mass concrete construction like raft.
- Concrete in water remaining structures like dam reservoir etc
- Exterior concrete work exposed to freeze / thaw conditions.
- Concrete in underground water tanks.

Advantages

- Provides a stable air void system with proper bubble size and spacing. This air void system protects concrete against damage caused by repeated freeze / thaw cycles.
- Reduced water without loss of workability.
- Improved resistance to de-icing salts, sulphate attack and corrosive water.
- Reduced permeability and improved water tightness.
- Reduced bleeding and segregation.
- Improved plasticity and workability.

Application Methodology

- Add **ShaliPlast® AE** to the dosing water. It should not come into contact with dry cement.
- Charge all concrete material in the proper order into the mixer with about 70 % of the mixing water and mix for the three minutes. Add rest quantity of water with admixture to obtain the required slump and mix for three addition minutes.
- Addition of 100 to 300 ml of **ShaliPlast® AE** per bag of cement will generally entrain 3-6% air in the concrete. This amount will vary depending on type of cement, fineness of sand, temperature, design of the mix, etc.
- It is compatible with all types of Portland cement including SRC (Sulphate Resistance Cement. and not compatible with high alumina cement.

Dosage

0.2 – 0.6 % by weight of cement. Do not allow over dosing. Due to overdosing setting time will be extended rigorously. It is advisable to carry out a trial to establish the exact & optimal dosage rate depending upon set retardation required.

Precautions & Limitation

- Add to mix independent of other admixtures.
- There will be small loss in air content during pumping.
- Add air entraining admixture with dosing water, preferably with dispenser.
- Thorough curing of concrete is advised using either curing compound or traditional methods like sprinkling of water or wet hessian bag.
- Avoid excessive vibration of air entrained concrete. It will almost be a self compacting concrete.

Health & Safety

- **ShaliPlast® AE** is non-toxic.
- 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 20 kg & 200 kg drum.

Storage

Store in a cool dry place under shed away from heat.

Shelf Life

9 months in original unopened condition.



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