

ShaliPlast® LT

Cold Weather Concreting Admixture



STP Limited

Description

ShaliPlast® LT is a brown admixture in liquid form for producing high quality concrete at moderately low temperatures, as low as -12°C.

Approvals / Standards

It conforms IS 9103-1999 and ASTM C 494, Type G.

Product Information

Form, Colour	Brown Liquid
Handling & Storage	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.
Packaging	Available in 225 kg sealed barrel
Shelf Life	12 months when stored in unopened sealed conditions away from heat and sunlight at 5 to 38°C.
Handling Precautions	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 at 27°C, 55% RH

Property	Method	Result
Density, gm / cc	Internal	1.24 ± 0.03
pH	Internal	3 - 4
Recommended dosage **	Trial & Error	2.0 - 2.5 % by weight of cement

*** 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® LT is ready for use in cold conditions such as:

- Slight daytime frost.
- Expected overnight frost.
- For concreting at low temperature during mixing, placing and curing.

Advantages

- Improved workability without increased water.
- Reduction in water without loss of workability.
- Increased frost resistance.
- Increases hydration heat.
- Improved strengths.
- Chloride free - does not attack reinforcement.

Application Information

- **Concreting Guidance:** The standard rules of good concreting practice, concerning production and placing are to be followed. Refer to relevant standards. Fresh concrete must be cured properly.
- **Dosing:** 2.0 - 2.5 % by weight of cement. Exact quantity is determined experimentally for the particular cases. Dosages outside the typical ranges quoted above can be used to meet particular requirements. Contact STP Limited technical team for guidance.

- **Compatibility:** **ShaliPlast® LT** is compatible with other STP Limited admixtures used in the same concrete mix. All admixtures should be added to the concrete separately and must not be premixed together prior to addition. The resultant properties of concrete containing more than one admixture should be assessed by trial mixes.
- **Dispensing:** **ShaliPlast® LT** liquid is added to the mixing water prior to its addition to the concrete mix as the last component.

Precautions

- When using **ShaliPlast® LT**, a suitable mix design should have been taken into consideration and local material sources should be trialed.
- **ShaliPlast® LT** should not be added to dry cement.
- **ShaliPlast® LT** should be added with mixing water or introduced at the end of mixing process.
- During concreting at low temperatures, cement aggregates and water should have temperatures at least higher than 0°C.
- Concreting is recommended to take place during morning hours and not in the evening.
- Concrete may be exposed to freezing if it reaches the minimum required compressive strength of 5 MPa (**DIN 1045**).
- Keep water/cement ratio as low as possible. Do not use water to increase the flowability.
- Protect concrete during setting and hardening with plastic sheets or other mediums that reduce loss of hydration heat.
- Before application, suitability tests must be performed and local regulations must be observed.

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

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent **Material Safety Data Sheet**.

- **ShaliPlast® LT** does not fall into the hazard classifications of current regulations. However, try to avoid contact with skin / eyes.
- 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.

Cleaning & Disposal

- Spillages of **ShaliPlast® LT** should be absorbed onto sand, earth or vermiculite and transferred to suitable containers. Remnants should be hosed down with large quantities of water.
- The disposal of excess or waste material should be carried out in accordance with local legislation under the guidance of the local waste regulatory authority.



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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