

# ShaliPlast® AF L

Alkali Free Liquid Set accelerating and Shotcreting Admixture



STP Limited

## Description

**ShaliPlast® AF L** is an alkali free quick set liquid additive for spay applied concrete in wet mix shotcrete process. Setting time and rebound loss during shotcreting is adjusted with the dosing.

**ShaliPlast® AF L** develops high early strength

It Conforms ASTM C 1141 Type II, Class A Gr. 9

## Characteristics

Form	Suspension	Setting Time, minutes	
Colour	Colorless	• Initial	3 – 4
pH	2.5 – 3.5	• Final	10 - 12
Specific Gravity	1.42 ± 0.02	Chloride Content	Nil

\* All data are based on tests carried out in laboratory conditions only at 25 deg C

## Applications

- Securing rock in tunnel and mines
- Tunnel lining and backfilling
- Slope stabilization
- High grade shotcrete for normal constructions.

## Advantages

- Low rebound for shotcrete applications.
- Alkali free non toxic
- Quick setting properties
- No strength loss of the accelerated concrete
- No contamination of ground water due to washed out alkali
- Easy overhead guniting
- Improved water tightness
- Chloride free, no danger for reinforcement bar.

## Application Methodology

- In case of surface preparation, concrete to be shotcreted must be clean and rough. All oil, dirt, debris, paint and unsound concrete must be removed. The surface must be prepared mechanically using a bush hammer, sandblaster or jackhammer which will give a surface profile of a minimum 1/8" (3mm) and expose the coarse aggregate of the concrete. The final step in cleaning should be the complete removal of all residue with a vacuum cleaner or pressure washing.
- No bond coat is required for this product.
- In case of application, set up wet shotcreting equipment in an area convenient to the placement site. Add **ShaliPlast® AF L** directly to the gun near the tip of the shotcreting nozzle using a liquid dispensing system.
- Skilled nozzle operation and thorough mixing within the concrete are essential.
- The concrete workability must be adjusted to suit the spray equipment, its capacity, temperature and other local conditions.

## Dosage

In general 3-10% by weight of cementitious material is suggested. For optimum performance, the w/c ratio of less than 0.45 is recommended. In most cases a dose of 6% bwc is suitable for spraying layers of 10 cm in single pass.

## Precautions

- In adverse temperatures, follow ACI recommendations for hot/cold weather concreting practices.
- Setting time and hardening of cement paste varies with dose of **ShaliPlast AF L** with different quality as well as quantity of cement and cementitious materials.
- It is recommended to carry out prior testing involving all components for compatibility.
- For optimum results, condition material to 20 – 30 °C
- Store product in dry place.
- Clean tools and equipment with water before the material hardens.

## Health & Safety

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

## Storage

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

## Shelf Life

6 months in original unopened condition.



**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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