

Sprayed concrete admixture

Uses

Sprayset SL is used in sprayed concrete, shotcrete and guniting processes where rapid setting is required.

Advantages

- Rapid set allows fast build-up
- Minimum rebound
- Single pass spraying for thick coating
- Excellent for overhead surfaces
- Can be used for 'wet and dry' processes
- Non-flammable

Description

Sprayset SL is a chloride free accelerating admixture. It is supplied as a pale yellow solution which is introduced through the spraying nozzle.

Technical support

Fosroc provides a technical advisory service for on-site assistance and advise on admixture selection, evaluation trials and dispensing equipment. Technical data and guidance can be provided for admixtures and other products for use with fresh and hardened concrete.

Typical dosage

The optimum dosage for Sprayset SL to meet specific requirements should always be determined by trials using the materials and conditions that will be experienced in use. This allows the optimisation of admixture dosage and mix design and provides a complete assessment of the concrete mix. A starting point for such trials is to use a dosage within the normal typical range of 1.0 to 5.0 litres/100 kg of cementitious material, including PFA, GGBFS or microsilica.

Use at other dosages

Dosages outside the typical range quoted above may be used if necessary and suitable to meet particular mix requirements, provided that adequate supervision is available. Compliance with requirements must be assessed through trial mixes. Contact Fosroc for advice in these cases.

Properties

Appearance	Pale yellow liquid
Specific gravity	1.38 @ 27°C *
Chloride content	Nil to BS 5075 *
Air entrainment	Nil

* The uniformity parameters like specific gravity, pH, chloride content etc. will vary for specific customer requirements and mix design. Please refer our MTC issued for specific product configuration for measuring our product parameters that will be constantly and consistently administered.

Application instructions

Compatibility

Sprayset SL is compatible with other Fosroc admixtures in the same concrete mix. All admixtures should be added to the concrete separately and must not be mixed together prior to addition. The performance of concrete containing more than one admixture should be assessed by trial mixes to ensure the desired combination of effects is obtained.

Sprayset SL is suitable for use with all types of ordinary Portland cements and cement replacement materials such as PFA, GGBFS and silica fume.

Stiffening and set

Stiffening occurs approximately after 10 seconds. As is usual with rapid initial acceleration of the cement hydration process the 28 day compressive strength will normally be reduced by approximately 25-35 %.

Dispensing and mixing

Sprayset SL is normally introduced directly after the air ring in the spray nozzle. In order to obtain a consistent supply of admixture at the nozzle the delivery system recommended is as follows : a pressure pot operating at 600 KPa delivery through a 20mm inside diameter pressure hose controlled by a pressure restrictor and tap.

With the 'wet process' significant advantage can be obtained by using a water reducing admixture such as Conplast SP 430GB to reduce the water content of the mix.

Sprayset SL

Effects of overdosing

An overdose of double the intended amount of Sprayset SL will result in increased setting of the mix before it reaches the surface to be sprayed. It will also result in a loss of strength.

Estimating

Packaging

Sprayset SL is available in 250kg and 280kg.

Storage

Sprayset SL has a minimum shelf life of 6 months in unopened original containers under normal warehouse conditions provided the temperature is kept within the range of 20°C to 40°C.

Precautions

Health and Safety

Sprayset SL does not fall into the hazard classifications of current regulations. However, it should not be swallowed or allowed to come into contact with skin or eyes.

Suitable protective gloves and goggles should be worn.

Splashes on the skin should be removed with water. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. If swallowed, seek medical attention immediately - do not induce vomiting.

For further information contact Fosroc.

Fire

Sprayset SL is water based and non-flammable

Cleaning and disposal

Spillages of Sprayset SL 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.