

TECHNICAL DATA GUIDE- CONCRETE ADMIXTURE

CSET AF 101

Set Accelerating (Alkali-free) Admixture for Sprayed Concrete

DESCRIPTION

CSET AF 101 is a quick setting and rapid hardening accelerating alkali free admixture consisting of a unique blend of accelerators in liquid form and used for shotcrete, concrete, mortar, renderings or screed. The addition of CSET AF 101 accelerates the hydration of cement and results in early setting time one to four times faster than the normal setting time.

CSET AF 101 is also used for sealing leakages and plugging to prevent water ingress. The addition of CSET AF 101 helps for fast-track constructions by early strength gain, supports cold weather concreting, allows earlier removal of formwork and counteracts retardation from plasticizers.

CSET AF 101 complies to the performance requirements of BIS 9103, Type 'C' of ASTM C 494.

TYPICAL APPLICATIONS

- Shotcrete applications for tunnel, underground and marine structures
- Slope stabilization
- Precast members with earlier stripping time
- Cold weather concreting
- Sealing leakages and prevent water ingress

FEATURES AND BENEFITS

- Accelerated set times across wide range of temperatures
- High early and ultimate strength gain
- Thicker layers up to 100 mm can be sprayed in one go, thus saving time, machinery and man power.
- Eliminates need of steam curing for early strength gain
- Minimized rebound loss of sprayed concrete

PERFORMANCE TEST DATA

Appearance	Light Brown Liquid
Relative density	1.38 ± 0.02 @25°C
pH	≥6
Chloride ion content	≤ 0.2%
Initial Setting time	< 3 Mins
Final Setting Time	< 8 Mins





DOSAGE AND DIRECTIONS FOR USE

Normal dosage rates of CSET AF 101 varies between 4% -12 % by weight of Cementitious material. Optimum dosage of CSET AF 101 should be determined by trials. Exact dosage rate depends on the needed reduction in set times, ambient temperature, type of cements, quality & quantity of binders, W/C ratio not exceeding 0.50.

Noticeable delayed acceleration occurs when used in high dosage, when sulphate resisting cements/ supplementary cementitious materials are used and ambient temperatures are low.

DISPENSING

The correct quantity of CSET AF 101 should be added at the nozzle of spraying equipment. measured by means of a recommended dispenser. CSET AF 101 is supplied in liquid form. It should be added in supplied form mixed with batching water

COMPATIBILITY

Depending on the performance requirements CSET AF 101 can be used in combination with SNF & PCE admixtures, air entrainers, accelerators etc.. CSET AF 101 should be not be premixed with other additives.

STORAGE & SHELF LIFE

CSET AF 101 should be stored in a shaded cool and dry place in stainless steel or plastic containers. The product may need agitation for homogenous suspension if stored for longer periods. Shelf life of CSET AF 101 is 12months from the date of manufacturing if kept in unopened, undamaged, original sealed packaging and kept within the range of 10°C to 50°C. If the product is frozen, thaw at +5°C or above and remix with mild agitation.

Failure to comply with recommended storage may deteriorate the product or packing.

PACKAGING

CSET AF 101 is supplied in 20 & 210 Litre HDPE drums.

HEALTH & SAFETY

CSET AF 101 is water based, non-flammable and non-hazardous. However it should not be swallowed or allowed to come into contact with skin and 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 refer to the material safety data sheet

DISCLAIMER

The information given is based on data and knowledge considered to be true and accurate and is offered for the user's consideration, investigation and verification. Since the conditions of use are beyond our control we do not warrant the results to be obtained. Please read all statements, recommendations or suggestions in conjunction with our conditions of sale including those limiting warranties and remedies which apply to all goods supplied by us. No statement, recommendation or suggestion is intended for any use which would violate or infringe statutory obligations or any rights belonging to a third party.

CBS CHEMICALS PRIVATE LIMITED

Regd: No.118, Varasiddi Building, Ground Floor, 2nd main, Kasturi Nagar, Bangalore-560 043

Plant: DP. No. 109, 3rd Main Road, SIDCO Industrial Estate, Thirumazhisai, Chennai – 602107

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Email: techsupport@cbschemicals.com

www.cbschemicals.com