



VITCON 9013 AFL

Alkali Free Accelerator for Wet Shotcrete

DESCRIPTION

VITCON 9013 AFL is alkali free liquid accelerator for wet shotcrete mix, whose dosage can be varied to the desired setting and hardening times. The mix containing VITCON 9013 AFL reduces any effect of alkali on concrete during shotcreting process. VITCON 9013 AFL also makes the shotcrete mix highly cohesive reducing losses on rebound effectively.

TECHNICAL DATA

Appearance / Colour	Off White liquid
Relative Density	1.44 ± 0.03
pH Value	2.5± 0.5
Chloride Content	<0.1%
Alkali Content	<1%

DOSAGE / USAGE

The dosage of VITCON 9013 AFL depends on the temperature conditions, cement reactivity and setting time. Normally the dosage of VITCON 9013 AFL in the range of 3 – 10% by weight of cement.

Initial Setting Time	< 6 min.
Final Setting Time	< 41 min.

The above results are variable with cement type, grade, aggregate quality and climatic conditions and also with dosage of VITCON 9013 AFL. The site trials are advisory to find out optimum dosage with desired performance. VITCON 9013 AFL is compatible with our VITCON range of superplasticiser, which is added to the shotcrete for slump retention.

APPLICATIONS

VITCON 9013 AFL is used in the civil and underground construction industry such as:

- Rock support in tunnels and mines
- Slope stabilization
- TBM tunnel linings / backfilling
- Soil stabilization in poor ground conditions



APPLICATION METHODOLOGY

- VITCON 9013 AFL is dosed at the shotcrete gun nozzle in the wet shotcreting process. The mix is prepared as per design calculations and availability of aggregate, cement, water and water reducing agents. The liquid mix is shot through the nozzle. At the end of the nozzle VITCON 9013 AFL is dosed through a separate line.
- Addition of VITCON 9013 AFL immediately accelerates the setting in shotcrete application and effectively reduces rebound losses. Moreover VITCON 9013 AFL also helps to build up an even layer on the surface with or without steel reinforcement.
- All testing should be aligned to EFNARC European Specification for Sprayed Concrete (1996) to evaluate the best performing mix design against economical considerations.

HEALTH & SAFETY

VITCON 9013AFL is non toxic, non flammable and non hazardous. However any contact with human body must be washed with plenty of water.

PACKING

Available 250 kg HDPE drums and in bulk.

STORAGE

Must be stored in original packing at ambient temperature, dry place under shed. The containers must be protected from direct sunlight. The best use before end date of each batch appears on the product label. After prolonged storage or transport we recommend to fully agitate it prior to use by mechanical stirring or recirculation pumping.

SHELF LIFE

If stored in tightly closed original containers under the above conditions, it has a shelf life of 6 months. Periodical remixing can extend the shelf life further.