



Anti-Washout Admixture, Powder Viscosity Enhancing Additive (VEA) and stabiliser for production of SCC, Underwater Concrete

General

SS - ViscoCon P is a powder anti washout admixture and viscosity modifier for concrete / mortar mixes which can be effectively used for under water concreting as well as for underwater repairs. The increased viscosity of the mix binds the binder efficiently lowering the wash out of cement and fines. The use of **SS - ViscoCon P** increases the resistance of mix to enable outside water to enter thereby protecting the mix proportions and properties. **SS - ViscoCon P** can be effectively used as viscosity modifying agent in designing self-consolidating concrete (SCC) mixes. Underwater concreting is always difficult due to fluidity of concrete / mortar mixes, which have higher potential for washout. Anti washout admixture addresses to this problem and enables placement under difficult conditions. A liquid version is available as **SS - ViscoCon L**, to be used under special conditions especially for underwater repairs of piles etc. with microconcretes.

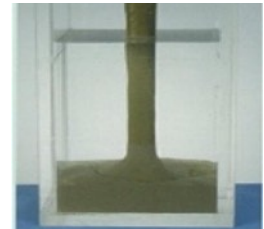
To determine the usage in particular conditions, preliminary trials are required. The viscosity required depends on individual applications and is dependent on placement methods like pumping, tremie concreting etc. and above all on whether pouring of concrete is in standing water or flowing water. **SS - ViscoCon P** increases cohesiveness of concrete by increasing viscosity of water leading to increased resistance to segregation. While using in design of SCC, the addition of **SS - ViscoCon P** provides excellent self-leveling properties. The gradual increase of slump can be used at advantage while placing under critical conditions.

Product Features

- Anti Washout Admixture
- Viscosity Modifying Agent
- Resistant to washout during underwater concreting / repairs
- Lowers Segregation
- Chloride Free
- Lowers Bleeding
- Increases Self Levelling Property
- Does not Entrain Air
- Progressive increase of viscosity
- Compatible with other admixtures
- Allows setting of concrete under water

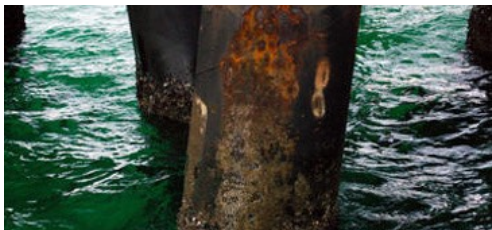


Concrete & Mortar Additives



Areas of Application

- For Underwater Concreting
- For SCC Concretes
- For underwater repairs like piles and addition to microconcrete
- Reduction of Dewatering Costs
- Foundation PCC Concrete and Rafts
- Foundation of Bridge Piers
- Piled Piers and Breakwater of Ports
- RCC for slabs of Caissons
- Marine underwater repairs of Jetties
- Concretes for strengthening of rubble stones in Breakwaters



Areas of Application

Specification Keywords	Anti washout Admixture, Segregation, SCC, medium workability, Viscosity Modifying Agent, Underwater Concreting / Repairs
Delivered As	Powder, Off White
Storage Instructions	In Original Packing. In a cool dry place.
Shelf Life	12 Months from date of Manufacture.
Post Use	Use Complete Packs, Dispose packaging according to local regulations.
Packing Size	25 kgs



Hazards and Safety



Technical Data

Bulk Density	0.60 +/- 0.05
Dosage	0.60 to 1.00% by weight of binder
Chloride Content	< 0.1%
Ash Content	Negligible

Instructions for Use

Add **SS - ViscoCon P** to the concrete during mixing, most preferably along with the additional water. Do not add **SS - ViscoCon P** to the dry aggregate/cement mix, as it reduces efficiency of the admixture. The admixture is most effective when dosed after about 70% of the mixing water has been added to concrete or towards the end of mixing cycle. The mixing time after addition of the admixture should be long enough to allow the admixture to plasticize the mix completely. The concrete to be produced can be mixed in a standard drum mixer or a modern batching plant / pan mixer setup.

In-case the admixture needs to be dosed on-site into transit mixers, please follow corresponding engineering and safety rules. Post addition, rotate the transit mixer drum at full speed for atleast 5 minutes, to allow the admixture to disperse homogenously. As with all chemical products, take care during use and storage to avoid contact with eyes, mouth, skin or food. In case of contact, rinse eyes and skin immediately with plenty of water. If ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use. Do not reuse containers for storing water or other consumable foods. Use Complete Packs.

Underwater Concretes are normally produced with a slump of about 200 mm. After **SS - ViscoCon P** is added to the mix, the slump will start getting reduced. Use of Superplasticizer like the **SS - PlastiCon Super** or the **SS - Plasticon Hyper** range if required. Recommended cement content should be above 400 kg per cum and sand content 40% of total aggregates. Slight retardation of the concrete is to be expected under water. International codes of practice should be used to regulate under water concreting.

Safety and Precautions

To determine individual technical suitability, test the admixture under application conditions. Please allow us to assist you for your concrete technology testing/needs. Follow relevant standards for production, placing and curing of concrete. As with any concrete, efficient curing is essential to develop final properties mechanical and durability properties.

Depending upon the concrete mix severe over dosage of the admixture may result in apparent incompatibility such as bleeding/segregation of concrete, quick loss of slump, excessive air entrainment, extended initial and final setting times etc. Slight overdosing would not severely affect the ultimate strength of concrete provided the concrete is properly mixed, handled and placed and adequately compacted and cured.