



Specially designed Multifunctional Chemical Foam Producing Concentrate for Manufacturing Foam Concrete and Lightweight Fill Materials using OPC, PPC, PSC or High GGBS Contents and Lightweight Fillers

General

SS - FoamCon CC is a Specially designed Multifunctional Chemical Foam Producing Concentrate. The material is based on selected foaming agents and stabilisers and is free from chlorides. It aids concretes in attaining good plasticity, workability, cohesion and freeze-thaw resistance by entrapping minute well-distributed foam into the mix. The concentrate needs to be used with a commercial foam generator [that mixes and aerates the concentrate to form a workable foam of shaving cream consistency. The main advantage is that the material does not have a bad odour similar to protein based foam concentrates.

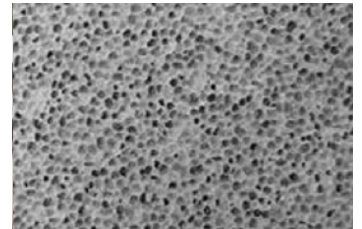
The concretes using the foam made with **SS - FoamCon CC** are homogenous, stable and free from bleeding and segregation. The formulation of **SS - FoamCon CC**, makes it suitable for use in lightweight concretes containing high percentage replacement of OPC by GGBFS or flyash. **SS - FoamCon CC** is suitable for making lightweight foam concrete / fill materials in ready-mix concrete, site batching plants, precast industry, or on site to fill large areas. The foam maintains stability / cohesion of the lightweight fill. Properly designed fill mixes can produce very homogenous concrete, which is easily workable without bleeding and segregation. Usage of **SS - FoamCon CC** reduces the chances of pump blocking and reduces the abrasion in the pipelines, thereby extending the life of concrete pumps. Please contact us for concrete technology support and design.

Product Features

- High Performance Multi-functional concentrate to manufacture stable foam for lightweight concrete
- Can be used with blended cements and mixes with high percentage of OPC replacement for high durability
- Robust Formulation, compatible with most foam generators
- Provides excellent freeze-thaw resistance to concrete
- Foams remain stable for long time
- Chloride free
- Not odorous similar to protein based concentrates
- Non-Toxic and Non inflammable
- Improves dispersion of foam in mix
- Optimizes water content in the mix



**Concrete &
Mortar Additives**



Areas of Application

- Lightweight Fills
- Lightweight Foam Concrete
- Pumpable Lightweight Concretes
- Suitable for all standard cements like OPC or Blended Cements or Mixes with high percentage of OPC replacement
- Mixes with high Fines Content
- Lightweight Concrete with polystyrene beads
- Lightweight Concrete with pond ash or fly-ash cindered aggregates
- Can replace brick-bat coba
- Trench and void fills in geotechnical/tunnel applications

Areas of Application

Specification Keywords

Multifunctional Foam Concrete Concentrate, stable foam, improved cohesion, stability, freeze-thaw resistance, pumpability, chloride free, OPC, Blended Cements, lightweight concretes

Delivered As

Yellowish-Brownish Liquid

Storage Instructions

In Original Packing. In a cool dry place. Do not agitate. Material Foams.

Shelf Life

12 Months from date of Manufacture.

Post Use

Use Complete Packs, Dispose packaging according to local regulations.

Packing Size

20 kg, 30kg, 200 kg

Assess Build Chem Private Limited



Hazards and Safety



Preliminary Trials Recommended

Technical Data

Sp. Gravity	1.05 +/- 0.05
Dosage	1.0 to 3.0 kg / 1000 litres of foam, based on foam densities needed
pH	> 6
Chloride Content	< 0.1%
Ash Content	Negligible

Instructions for Use

SS - FoamCon CC is not an admixture but a concentrated foaming agent. The material is used to produce a stable foam, which in turn is used for making foam concrete in conjunction with commercially available foam generators and mortar mixers.

The density of the foam produced by the foam generator can be controlled with the dosage of **SS - FoamCon CC**. Lower doses produce lighter foam and higher doses produce denser foam. The foam density can vary from 0.4 to 1.5 kg / l [400 - 1500 kg / m³]. The denser the foam, the more stable the foam concrete will be. The stable foam so prepared can be directly added to the mixer to produce lightweight foam concrete. The air-flow rate of foam generator / compressor is suggested to be more than 6-8 7 lpm to manufacture stable foam.

The foam manufactured with **SS - FoamCon CC** is added to the concrete during mixing, after all ingredients are added. The lightweight mix is composed of cement, flyash, pond ash and other lightweight aggregates and fillers. A properly designed mix is ideal. Do not add **SS - FoamCon CC** to the dry filler / cement mix, as it reduces efficiency of the admixture.

The foam made with **SS - FoamCon CC** is most effective when dosed after all of the mixing water has been added to concrete, and a flow of 40 cm on flow table is achieved. The mixing time after addition of the foam should be long enough to allow the mix to become homogenous. The lightweight concrete to be produced can be mixed in a standard drum mixer or a modern batching plant / pan mixer setup. Measure the density of the mix as per requirements and codes.

In-case the foam 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 3-5 minutes, to allow the foam to disperse homogeneously. 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.

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. Air entrainment reduces the strength of the concrete and should be considered as part of the mix design process

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.