

COSTAR LIGHTCRETE

Admixture for Lightweight Concrete

Description

Costar LightCrete is a concentrated liquid admixture for concrete to produce foamed concrete that is lightweight and is able to flow for long distances under its own hydraulic head.

Benefits

- Stable air content also after placing of the concrete.
- Easily controlled addition of pre-foam to pre-batched mortar allows close control of finished density
- Easy conveyance of lightweight concrete with concrete pump
- Volume retaining and non-shrink foamed concrete even after hardening.
- Expensive blending equipment is not required as mixing can be carried out in the drum of a ready mix truck
- ■Compatible with lightweight aggregates like expanded clay
- Produces a highly mobile foamed concrete which is easily placed without compaction

Use

Costar LightCrete is typically used for the production of foamed low density concretes which can be used for void filling for elimination of fire risk, trench filling for permanent, non-sink reinstatement or as a semi-structural support in cases such as embankments, bridge abutments, tunnels and arches.

Instruction for Use

Costar LightCrete is being added to the gauging water or added simultaneously together with the gauging water into the concrete mixer. The mixing time necessary to achieve a specific density of fresh concrete depends on type of mixer used, aggregates and binder. The results from these trials with regard to the mixing procedure should be strictly adhered to. Costar LightCrete may also be added to the pre-mixed concrete directly into the transit mixer at the point of discharge. An additional mixing time of at least 2 minutes per m³ concrete must be strictly observed. Before being discharged, the concrete must be tested for the intended density. The standard rules of good concrete production and placing must also be observed.

Proper curing procedures must be observed for surfaces which are to be exposed to weathering. Otherwise, premature drying out close to the surface may cause lightweight concrete to lose mechanical strengths. Many variables in concreting materials and conditions can affect the selection and use of an admixture. Trials should be made using relevant materials and conditions in order.

Dosaging

Classified lightweight concrete: 0.4-0.8% (by weight of cement) Lightweight (pore) Concrete: 0.5-2.0 % (by weight of cement)

Actual dosage depends on the original starting materials and the desired final density of the foamed concrete. Therefore, on-site trials are recommended.





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Typical Properties

Appearance	Brownish Liquid	
Density	1.01g/ml (ASTM C494)	
PH Value	6.50-8.00	

Packaging

Costar LightCrete is packaged in 5 liters, 25 liters Kegs and 200 liter drums.

Storage and Shelf Life

Shelf life of Costar LightCrete is 12 months provided the temperature is kept within the range of 5°C to 50°C.

Health, Safety and Handling

For further information consult the Product Safety Data Sheet available for this product.

Limited Warranty

All recommendations, statements and technical data herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty either expressed or implied. User shall rely on his or her own information and tests to determine suitability of the product for the intended use and user assumes all risk and liability resulting from his or her use of the product. Nothing contained in any supplied materials relieves the user of the obligation to read and follow the warnings and instruction for each product as set forth in the current Technical Data Sheet, product label and Safety Data Sheet prior to product use away.

