CRETE FOAM

TECHNICAL DATA SHEET

FOAMING AGENT FOR LIGHT WEIGHT CONCRETE

Description

CRETE FOAM is an efficient low dosage foaming admixture, which is used to produce lightweight cementitious materials (Concrete, Mortar, Cement slurry) for a variety of insulation and construction applications.

CRETE FOAM helps to produce a stable aerated mortar, by entrapping air into prepared cement slurry in the shape of discontinued air bubbles to form a cellular structure throughout the mass. The cellular structure significantly reduces the thermal conductivity and density of concrete, resulting in a lower dead load imposed on the structure. It provides excellent resistance to freeze and thaw.

Uses

CRETE FOAM can be used for the production of low-density foamed mortar and concrete.

- As flat roof insulation screeds
- Insulated floor screeds.
- As a backfill concrete.
- Fabrication of light weight beams, blocks and panels
- Fire barrier.
- Sound insulation of walls and ceilings
- As encasement concrete.

Advantages

- Generates ultra-stable air bubbles that are strong, small and evenly distributed in the concrete.
- Stable foam under alkaline condition of cement slurry.
- Increase in resistance of concrete against frost and de-icing salts.
- Suitable to use with all types of light weight aggregates to produce very low density concrete mix.

Characteristics

Form : Liquid
Colour : Translucent to colourless
Relative Density : 1.01± 0.01 at 25^0C
pH : Min. 6
Chloride ion content: Nil (As per BS 5075 Part I)

Dosage

As a guideline, the rate of addition generally varies between 250 gm to 700 gm per 50 kg of cement. The optimum dosage should be determined by site trials with the particular mix depending upon the density, mixing method, starting materials, aggregate grading, strength requirement and temperature.

Direction for Use

CRETE FOAM is supplied as 'ready for use' pack and should be added to the mix with gauging water. Generally, higher the dosage rate, greater the air entrainment but mixes with low workability requires a higher dosage rate to give a specified air content. In addition, concrete having a low cement but high sand content will require less CRETE FOAM than a cement rich, low sanded concrete. Other factors to be taken into account include aggregate grading, strength requirement, yields and temperature. Foamed concrete made by CRETE FOAM of lightweight and free flowing. It can be placed easily by pumping and does not require compaction or levelling. It has superior strength, excellent resistant to water and frost and provides a high level of sound and thermal insulation.

Compatibility

CRETE FOAM can be used with all types of cements except high alumina cement. CRETE FOAM is also compatible with slag and pozzolans such as fly ash and silica fume. It is compatible with PC based superplasticizers, Sulphonated Napthalene based superplasticizers and ligno- sulphonates based plasticizers. Site trials should be carried out to optimize the dosages.

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Corrosion

It neither initiates nor promotes corrosion as it does not content any harmful chemicals. Rather it reduces the risk of corrosion of reinforcement or other embedment, as it reduces permeability - increased water tightness thus, enhancing durability of concrete.

Technical Support

FIRSTCHOICE SPECIALITY CHEMICALS PRIVATE LIMITED provides technical advisory services for on-site assistance and guidance on mix design, optimum dosage evaluation of trials.

Packaging

CRETE FOAM is supplied in 20 kg, 200 kg drums or in bulk on request.

Storage and Shelf life

CRETE FOAM must be stored where temperatures do not drop below +5°C. If product has frozen, thaw at +5°C or above and completely reconstitute using mild mechanical agitation. Do not use pressurized air for agitation. Store under cover, out of direct sunlight and protect from extremes of temperature.

Shelf life is 12 months when stored as above.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult our local FIRST CHOICE SPECIALITY CHEMICALS PRIVATE LIMITED representative.

Fire

CRETE FOAM is water based and non-flammable.

Cleaning of Tools

Clean all tools and application equipment with water immediately.

Safety Precautions

CRETE FOAM does not fall into the hazard classifications. However, it should not be swallowed or allowed to come into contact with the 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 the eyes it shall be rinsed immediately with plenty of water and medical advice sought immediately. If swallowed, medical attention shall be sought immediately - Vomiting should not be induced.

Note

All Technical Data Sheets are updated on regular basis; it is the user's responsibility, to obtain the most recent issue.
Field services where provided, does not constitute supervisory responsibility, for additional information contact our local FIRSTCHOICE SPECIALITY CHEMICALS PRIVATE LIMITED representative.

Disclaimer

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