



Concrete Foaming Agent



RAMKA
CONSTRUCTION
CHEMICALS

FLY® liquid concrete foaming agent contains chemical compounds and surfactants and can generate very fine, compact, stable bubbles measuring 0.3 to 0.8 mm. The foaming agent creates bubbles in concrete: water, cement, and foam are combined in defined proportions to form a dense, porous material known as foam concrete. The liquid is diluted with water in a tank, passed through a lance by a hydraulic pump, and discharged as creamy foam into the mixer. The foam, water, and cement are then combined to produce foam concrete.

Applications

- Production of foam concrete for building floors.
- Production of lightweight CLC blocks.
- Production of lightweight wall panels.
- Production of foam concrete for road maintenance.
- Soil stabilisation.
- Production of thermally and acoustically insulating concrete blocks and panels.
- Roof slope formation.
- Filling sewer voids and tunnels.
- Insulation of cooling and heating installations.

Approvals / Standards

- ASTM C796
- ASTM C869
- ACI 523.1R - 06

Advantages / Benefits

- Low weight and suitable relative strength at a density of 650 to 1100 kg/m³.
- Improves freeze resistance of foam concrete.
- Produces stable, creamy foam.
- Neutral pH and does not damage services or metals embedded in building floors.
- Promotes rapid setting of foam concrete in cold seasons.

Guideline for Use

Dissolve the liquid foaming agent in water at a 1:50 ratio. Pass the diluted solution through a lance or foam generator to produce creamy foam. The generated foam volume is at least 1000 L (1 m³). Add the foam to the mixer while water, cement, and the other specified constituents are being mixed. Polypropylene fibres may also be used to help prevent surface cracking and increase the strength of the foam concrete.

Dosage

Consumption varies with project conditions, material type, foam-generator type, ambient temperature, and other environmental factors, and must be established through site trials. The stated range is 400 to 550 g per 1 m³ of foam concrete. When several concrete admixtures are used together, contact RAMKA's technical department.

Storage

+10 to +30 °C; store in dry conditions away from direct sunlight.

Packaging

20 kg pail / 1100 kg tank

Shelf Life

One year in the original packaging.

Health and Safety

- This material is not hazardous to human health or the environment, but it must not be swallowed or allowed to contact the eyes.
- In case of accidental contact with skin or eyes, immediately rinse the affected area with plenty of fresh water.
- If swallowed, seek medical attention immediately.
- Refer to the Material Safety Data Sheet (MSDS).
- This material is non-flammable.

Basis Of Data

Product Information

Chemical base	Chemical, including surfactants and other constituents
density	1.03±0.03 g/cm ³
pH	7±2
Chloride ion	None



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Tel: (+98)2533557596

Mail : info@Ramkaco.com

1st Floor, Loghman St., Qom, Iran

www.RamkaCo.com

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