



AIREN

Air Entraining Agent for Concrete & Mortar

DESCRIPTION

AIREN is a slightly alkaline solution, miscible water, with a specific gravity of 1.02. It is an air entraining agent, based on selected resin, complying with ASTM – C260-66T & IS:9103:1979.

ACTION

AIREN acts on the interface of the sand and water to produce stable microscopic air bubbles uniformly distributed throughout the concrete. These bubbles serve to greatly reduce both the amount of water absorbed and damage which arises from the formation of ice crystals in the pores of concrete.

Apart from its usefulness in providing a much greater resistance to spalling and racking in freeze / thaw environments AIREN improves the properties of fresh concrete. Thus it gives concrete better cohesion workability, reduce segregation and bleeding which often occur when utilising low quality aggregates and harsh mixes.

USES

AIREN should be used wherever well-compacted concrete, resistance to extreme thermal variation and frost action is required. Such situations include roads, runways, paving, hardstands, canal lining, open storage areas etc.

AIREN is of great benefit in lightweight concretes, where it improves workability and reduces tendency to bleed. It is useful in reducing the density of light weight concrete blocks, so that blocks meet thermal insulation requirements. AIREN gives increased durability to dense concrete and because of the entrained air, a reduction in material costs is achieved.

METHOD OF USE

AIREN is supplied ready for use and should be added to the mix with gauging water.

RATE OF ADDITION

A dosage rate of 50-100ml of AIREN per 50kg of cement will normally produce an entrained air of 5% \pm 1%. The appropriate dosage rate of AIREN will vary depending upon the particular materials and mix design being used. The exact dosage should be determined by site trials.

Generally the higher the dosage rate, the greater the air entrainment but mixes with low workability require a higher dosage rate to give a specified air content. In addition, concrete having a low cement but high sand content will require less AIREN than cement-rich, low sanded concrete. Other factors to be taken into account include aggregate grading, strength requirement, yield and temperature.

PROPERTIES

AIREN does not contain calcium or any other chemicals, which could be harmful to the durability of concrete.

AIREN may be used with all type of Portland concrete.

AIREN is formulated from chemicals which present no fire or health hazards.

AIREN is formulated from carefully selected raw materials and is manufactured under control conditions to give a consistent product.

PACKING

AIREN is available in 25 and 200 litres metal/plastic drums.

TECHNICAL SERVICE :

SWC group maintains a technical division with highly qualified technical personnel to investigate and advise on subjects related to Concrete and the Construction Industry. The Division can advise on the correct use and selection of right products at the right place.

SWC undertakes Consultancy Service for diagnosis and rehabilitation of distressed structures. SWC undertakes Contracts on turnkey basis for total Waterproofing System with guarantee

NOTE : This Technical data sheet is to be used as guidance only. Although the basic formulation of the product remains unchanged, production refinements arising from continuing research and evaluation programmes may occasionally result in marginal change in properties. The recommendation and properties of the product based on continuous monitoring of the product are not intended to infringe on other patents.

THE STRUCTURAL WATERPROOFING CO.PVT.LTD.

Regd. Office : 21/1 Dover Road Calcutta- 700 019 **Dial :** 2475-2684/5378/9950, **Fax :** 2475- 8240
Calcutta : Plot 38/1, Block-GN, Sector IV &V, Salt Lake City, Calcutta- 700 091
Dial : 2357- 3546/3547 , **Fax:** 2357 3881
Delhi Office : 406, Deepali, 92, Nehru Place, New Delhi - 110 019, **Dial:** 26445680 &
26435432 **Fax:** 26416861
Mumbai Office : 56, Mahavir Centre, Sector -17, Vashi , Navi Mumbai - 400 703,
Dial: 27893601, **Fax:** 27893571 **E-mail:** swcbom@bom5.vsnl.net.in
Chennai Office : 81, 3rd Floor, A, Sulochana Terrace, 1st Main Road, Gandhi Nagar, Adayar,
Chennai-600 020 **Dial.** 24423731 **Fax** 24422476
Bangalore Office : 104, Victoria View, Borewel Road, White Field, Bangalore – 560 066. **Telefax :** 080 – 3310112
Email – swcbangalore@yahoo.co.in

