

CICO PLAST-AEA

Air Entraining Agent for Concrete & Mortar

CICO PLAST- AEA is a slight alkaline solution, miscible with water, with a specific gravity of 1.02. It is an air entraining agent based on selected natural rosin and synthetic additives, complying with **ASTM-C 260-66T &IS: 9103-1999**.

USES

CICO PLAST- AEA should be used wherever a well compacted durable concrete, resistant to extreme thermal variation and frost action is required. Such situations include roads, runways pavement, hard-stands dams, canal lining, open storage areas, etc.

CICO PLAST- AEA is of great benefit in light weight concrete, 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. **CICO PLAST- AEA** gives increased durability to dense concrete and because of the entrained air, a reduction in material costs is achieved.

MODE OF ACTION

CICO PLAST- AEA 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 cracking in freeze/thaw environments **CICO PLAST- AEA** improves the properties of fresh concrete. Thus it gives a concrete better cohesion and workability, reduced

segregation and bleeding which often occur when utilising low quality aggregates and harsh mixes.

METHOD OF USE

CICO PLAST- AEA is supplied , ready to use and should be added to mix with gauging water.

RATE OF ADDITION

A dosage rate of 50-100 ml of **CICO PLAST- AEA** per 50 Kg of cement will normally produce an entrained air of 5% $\pm 1\%$. The appropriate dosage rate of **CICO PLAST- AEA** 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 low cement but high sand content will require less **CICO PLAST- AEA** than Cement-rich, low sand concrete. Other factors to be taken into account include aggregate grading, strength requirements, yield and temperature.

PROPERTIES

- Does not contain calcium chloride or any other chemicals which is harmful to the durability of concrete.
- May be used with all type of Portland cement.

- Is formulated from chemicals which present no fire or health hazards.
- Is formulated from carefully selected raw materials and is manufactured under control conditions to give a consistent product.

PACKAGING

Is available in 20 and 200 kg drum/plastic barrel.

Important Note:

All CICO products are sold in the market after strict Quality Control in line of ISO 9001 and guaranteed against any manufacturing defect. Although the basic formulation of Company's products generally remains unchanged, production refinements arising from continuing research and evaluation program may occasionally result in marginal changes in properties. CICO aspires to ensure that any recommendation, advice, test data, specification, method statement and other information given in this product datasheet is accurate and best of company's knowledge. Since, the company (CICO TECHNOLOGIES LTD) has no control over the selection of its product, applicators, application methodology, how and where it is applied, therefore, the company cannot accept any liability directly or indirectly arising from the use of its product. It is important to any customer, user or specifier satisfies him / herself that the product is suitable for the intended purpose including health, safety and environmental aspect. Unless or otherwise agreed in writing, all products of the company are sold strictly pursuant to the terms of our standard conditions of sale which are available upon request. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. All customers, users, specifiers should ensure that they examine the suitability of the product with company's latest product data sheet.

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