



ISO 9001:2000

CICO PLAST AEA

Air Entraining Agent for Concrete & Mortar

DESCRIPTION : **CICO PLAST AEA** is a slightly alkaline solution, miscible with water, with a specific gravity of 1.02. It is an air entraining agent, based on selected resin, complying with ASTM-C 260-66T.

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.

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 paving, 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.

METHOD OF USE : **CICO PLAST AEA** is supplied ready to use and should be added to the 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% ± 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 a low cement but high sand content will require less **CICO PLAST AEA** than cement-rich, low sanded 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 could be 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.

PACKING

: Is available in 20 and 200 Litre/ 240 Kg drum/plastic barrels.

PRODUCT INFORMATION

: Although the basic formulation of our products generally remains unchanged. Production refinements arising from continuing research and evaluation program may occasionally results in marginal changes in properties.

TECHNICAL SERVICE

- * **CICO** maintains a technical division with highly qualified Technical Personnel to investigate and advise on subjects related to concrete and the construction industry. The Division will advice on the correct use and selection of right products at the right place.
- * **CICO** undertakes Consultancy Service for diagnosis and rehabilitation of distressed structures
- * **CICO** undertakes jobs as a package for total waterproofing system with guarantee

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