



ISO 9001:2000

CICO PLAST-A

Accelerating Water Reducing Admixture

DESCRIPTION : **CICO PLAST-A** is a liquid with a specific gravity of 1.28 ± 0.02 . It is a concrete accelerating and plasticising agent complying with ASTM C-494 Type E. IS 9103:1999

USES : The use of **CICO PLAST-A** accelerates the setting and hardening of concrete mix, thereby achieving higher early strength with all the resultant advantages of speeding up the job. These accelerating properties of **CICO PLAST-A** can be utilised in many ways, all of which can be shown to save time and money.

The benefit to be derived from the use of **CICO PLAST-A** is that of reducing the water content of the concrete or mortar without any loss of workability. This improves the general properties of the mix, reduces the risk of segregation, increases the density and the compressive strength thereby making the concrete highly impervious and more durable.

For working in very low ambient temperatures the incorporation of **CICO PLAST-A** provides the means to continue the placing of concrete, when without it work would have to be stopped. As an anti-frost, **CICO PLAST-A** offers protection in two ways—firstly by reducing the water content, which is vulnerable to frost, secondly by the ingredients which permit the hydration of the cement to continue as it would at normal temperature by heat evolution.

ADVANTAGES : In all types of precast/plain concrete work, where earlier release from moulds and handling of units is essential for economical production, **CICO PLAST-A** is invaluable through the whole year, the rate of addition being adjustable to meet variations of temperature.

Structural Concrete : In structural concrete involving expensive shuttering, **CICO PLAST-A** enables earlier striking and re-utilisation of form work which offers immediate appeal on ground of speed and economy.

Floors, Roads, Runways, etc : In granolithic floors, road, runways, hardstandings, paving etc the ability to occupy the areas in the shortest possible time after laying is an obvious factor in favour of using **CICO PLAST-A**. Where accelerated hardening of granolithic floor is required, care must be taken that the setting/shrinkage is kept to an absolute minimum. **CICO PLAST-A** enabling a fully workable granolithic mix to be produced with the lower water/cement ratio, will reduce the setting/shrinkage factor and the risk of lifting and/or cracking of the topping. Additionally, the improved cohesion of the mix enables a smooth, hardwearing surface to be achieved without the production of excessive laitence.

Economics : In the sole interest of economy **CICO PLAST-A** allows the use of leaner mixes to meet specified strength of concrete of given mix properties is related to the water/cement ratio, the lower the water content, the higher is the strength. It follows, therefore, that **CICO PLAST-A** giving higher strength through its plasticising properties plus setting and hardening, provides a means of maintaining equivalent strength at a reduced cement content.

METHOD OF USE : **CICO PLAST-A** is supplied ready for use and should be added to the mixing water. It should not be added neat to the dry cement. No extension of normal mixing time is necessary which is about 2 - 3 minutes.

RATE OF ADDITION : This varies from 0.85 - 1.5 litres per 50 kg of cement depending upon the amount of acceleration of hardening required and on the ambient conditions. The exact dosage should be determined by site trials. Normal acceleration of hardening for emergency repair and earlier form release the dosage of **CICO PLAST-A** should be approximately 1 litre per 50 kg cement.

PROPERTIES

Compatibility : Can be used with all types of Portland cement.

Handling : Is formulated from chemicals which present no fire or health hazards.

Consistency : Is formulated from fully selected raw materials and is manufactured under control conditions to give a consistent product.

SHELF LIFE : Approximately 12 months if kept in unopened containers under normal temperature condition.

PACKING : Available in 20 & 200 Litre drum/plastic barrel packing

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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