



CN-PLAST-AP

**Concrete Plasticiser, Normal Water Reducing
Admixture with Air Entraining Agent**

DESCRIPTION

“CN-PLAST-AP” is a concrete admixture based on modified Ligno-sulphonates, combining the properties of superplasticiser, high range water reducing and air entraining agent for concrete complying with IS : 9103-1979, ASTM C 494 & ASTM C 260.

ACTION

“CN-PLAST-AP” produces an extremely workable flowing concrete without loss of strength or enable large water reduction to be made for the same workability. It also acts on the interface of the sand and water to produce stable microscopic air bubbles uniformly distributed through out the 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 deficient in fines.

USES

“CN-PLAST-AP” should be used wherever a well compacted durable concrete, resistant to extreme thermal variation and frost action is required. Due to its cement saving property the heat of hydration is reduced in mass concrete.

Such situations include roads, runways, paving, hardstands, dam, canal lining, open storage areas etc.

“CN-PLAST-AP” 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 requirement. “CN-PLAST-AP” gives increased durability to dense concrete and because of the entrained air, a reduction in material costs is achieved.

ADVANTAGES

- Substantial improvements in workability and flow properties without increased water produces self-levelling concrete which can be poured into place around congested reinforcement and requires little (or no) vibration to achieve optimum compaction. The bond strength of concrete to reinforcement steel is considerably increased .
- For a given concrete mix keeping the cement consumption and workability constant by reduction in the amount of mixing water upto 20%, an increased in strength approx. 25% can be achieved.
- Water reduction minimises shrinkage cracking thereby producing close textured impervious concrete with improved durability and surface finish.
- By keeping workability and strength constant definite cement economy ranging 12% to 15% can be obtained.
- By incorporating air into the concrete much greater resistant to spalling and crazing in freeze/thaw environment is achieved. “CN-PLAST-AP” improves the properties of fresh concrete.

PROPERTIES

Form	:	Liquid
Colour	:	Dark Brown
Specific Gravity	:	1.15 ± 0.02
Ph	:	7 ± 0.5
Air Entrainment	:	Approx. 4 – 7%
Solid Content	:	40 ± 2%
Ash Content	:	2.0 ± 0.5%
Chloride Content	:	It does not contain Calcium chloride or any other chemicals which could be harmful to the durability of concrete.
Compatibility	:	Can be used with all type Portland Slag Cement, Sulphate Resisting Cement and it is compatible with PFA (Fly Ash).
Consistency	:	“CN-PLAST-AP” is formulated from carefully selected raw materials and is manufactured under control conditions to give a consistent product.
Handling	:	“CN-PLAST-AP” is formulated from chemicals which present no fire or health hazards.
Storage	:	If stored in unopened containers at normal ambient temperatures, a shelf-life of approximately 12 months could be expected.

DOSAGE

“CN-PLAST-AP” is supplied ready for use: For maximum dispersion throughout the mix, measured quantity “CN-PLAST-AP” should be added directly into mixer at the same time as the mixing water, on no account should be added to the dry cement.

PACKING

“CN-PLAST-AP” is available in 25 and 200 ltrs drum / barrels.

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.

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