

TECHNICAL DATA SHEET

ADDAGE PLAST AP 501

Plasticizing and water proofing concrete Admixture based on lignosulphonate

PRODUCT DESCRIPTION

ADDAGE Plast AP 501 is based on Sulphonated Naphthalene Polymers and supplied as a brown liquid instantly dispersible in water. ADDAGE Plast AP 501 has been specially formulated to give high water reductions without loss of workability or to produce high quality concrete of reduced permeability.

Plasticizer for pumpable concrete on Sulphonated Naphthalene base

PROPERTIES

Allow specified strength grade to be met at reduced cement or increased workability.

Water reducing significantly improves compressive strengths at all ages and enhances durability through the production of low permeability concrete.

Minimizes the risk of segregation and bleeding and assists in the production of a dense close textured surface improving durability.

APPLICATION

To improve the effectiveness of the water content of a concrete mix.

To produce pumpable concrete.

To produce high workability concrete without loss of strength. To promote high, early and ultimate strengths by taking advantage of water reducing whilst maintaining workability

To produce high workability concrete reducing little or no vibration during placing.

TECHNICAL SPECIFICATION

Test	Result
Colour	Brown
Sp. gravity	1.15gm/cm ³
pH	7-9
Chloride Content	Nil

ADVANTAGES

Chloride free – safe in prestressed concrete and with sulphate resisting cements and marine aggregates.

Compatible with all types of cement except high alumina cement.

Early strength is increased upto 40 to 50 % if water reduction is taken advantage of generally, there is improvement in strength upon w/c ratio and other mix parameters.

Compatibility : Can be used with all types of cements except high alumina cement. ADDAGE PLAST AP 501 is compatible with other types of admixtures when added separately to the mix. Site trials should be carried out to optimize dosages.

Workability : Can be used to produce flowing concrete that requires no compaction. Some minor adjustments may be required to produce high workable mix without segregation.

Cohesion: Cohesion is improved due to dispersion of cement particles thus minimizing segregation and improving surface finish.

Compressive strength: Early strength is increased upto 40 to 50 % if water reduction is taken advantage of generally, there is improvement in strength upon w/c ratio and other mix parameters.

Durability : Reducing in w/c ratio enables increase in density and impermeability thus enhancing durability of concrete.

DOSAGE

The optimum dosage is best determined by site trials with the concrete mix which enables the effects of workability, strength gain or cement reduction to be measured. Site trials with ADDAGE PLAST AP 501 should always be compared with mix containing no admixture, as a guide, the rate of addition is generally in the range of 0.6 – 1.5% by weight of cement.

STANDARDS COMPLIANCE

Addage Plast AP 501 conforms to IS: 9103: 1979 as a Water Reducing admixture from Bureau of Indian Standards. It also complies with IS2645: 1975 and BS 5075 Part 3 and ASTM C 494 Type F.

PRECAUTION

A severe over dosage of ADDAGE PLAST AP 501 will result in following

Increase in air entrainment.

Increase in workability.

Retardation of initial and final setting times if the concrete is properly cured the ultimate strength of concrete will not be adversely affected and will generally be higher than normal concrete.

DISPENSING

For best results, ADDAGE PLAST AP 501 should be added in the specified amount along with the measuring water.

STORAGE:

ADDAGE Plast AP 501 should be stored in a cool place and protected against moisture.

SHELF LIFE

ADDAGE Plast AP 501 has a shelf life of 12 months in unopened containers when stored in a dry environment at temperatures room temperature. It should be preferably stored in shade.

PACKING:

ADDAGE Plast AP 501 available in 60 kg can & 250 kg barrel.

