



SUPAPLAST-HS

Superplasticiser/High Range Water Reducing Admixture

DESCRIPTION

“SUPAPLAST-HS” is a new generation concrete admixture based on a specially selected high molecular weight Naphthalene Formaldehyde condensate and an organic polymer. This has high plasticising effect and acts as high range water reducer and integral cement waterproofer for concrete. "SUPAPLAST- HS" conforms to ASTM C-494 Type F & G, IS 9103-1999.

USES

“SUPAPLAST-HS” can be used to either produce extremely workable flowing concrete without loss of strength to enable large water reductions to be made for the same workability which results in a dense, watertight concrete with higher, early and ultimate strengths.

ADVANTAGES

Substantial improvements in workability and flow properties without any increase in water, produces self-leveling concrete which can be poured in places around congested reinforcement and require little (or no) vibration to achieve optimum compaction. The bond strength of concrete to reinforcing steel is considerably increased.

The internal friction and thixotrophy of the mix is reduced to a minimum without the risk of segregation, thus making the concrete very much workable.

Very significant water reductions minimize shrinkage or cracking, thereby producing close textured, impervious concrete with improved durability and surface finish. This is of particular importance in liquid retaining and water bearing structures. Suitable for use in most types of concrete above and below ground level subject to surface water, water under pressure and aggressive atmospheric conditions.

For a given concrete mix, keeping the cement consumption and workability constant, large reduction in the amount of mixing water can be achieved to produce concrete of very high strength. Alternatively for the same concrete mix, by keeping the workability and strength constant, a definite cement economy ranging from the 15% to 25% can be obtained depending on the rate of addition. Higher production and/or reduction in number of moulds is possible for precast industries.

PROPERTIES

| | | |
|---------------------|---|--|
| Form | : | Liquid |
| Colour | : | Brown |
| Specific Gravity | : | 1.22 ± 0.02 |
| Air Entertainment | : | May increase very marginally. |
| Setting & Hardening | : | There may be mild retarding effect on setting time at higher dosage. |
| pH Value | : | 7 ± 1. |
| Chloride Content | : | Nil. |
| Compatibility | : | Can be used with all type of Portland and slag cements including sulphate resistant cement. |
| Consistency | : | “SUPAPLAST-HS” is formulated from carefully selected raw materials and is manufactured under control conditions to produce a consistent product. |

HANDLING

“SUPAPLAST-HS” 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.

METHODS OF USE

“SUPAPLAST-HS” is supplied ready for use. For maximum dispersion throughout the mix measured quantity of “SUPAPLAST-HS” should be added directly into the mixer at the time of mixing water. On no account it should be added to dry cement. To achieve best results, the concrete mixer should be rotated for 2-3 minutes after addition of “SUPAPLAST-HS”.

RATE OF ADDITION

The optimum dosage should be determined by site trials with the particular concrete mix. As a guide, rate of addition is generally in the range of 200 to 600 ml per 50 kg of cement depending on the function to be performed

| Function | Dosage |
|--|---------------------------------------|
| 1) As superplasticiser-for flowing concrete | 200to 500 ml per 50 kg of cement. |
| 2) As integral cement waterproofer for dense watertight concrete (with water reduction) | 300ml per 50 kg of cement. |
| 3) As high range water reducing admixture for high strength concrete (with large water reduction) | 400 to 600 ml per 50 kg of cement. |
| 4) As high range water reducing admixture for high performance concrete (with extra large water reduction) | 600 ml to 1500 ml per 50 kg of cement |

PACKING

“SUPAPLAST-HS” is available in 25 and 100/200 litre drums.

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.

THE STRUCTURAL WATERPROOFING CO.PVT.LTD.

Regd. Office : 21/1 Dover Road Calcutta- 700 019 **Dial :** 2475-2684/5378/9950, **Fax :** 2475- 8240
Calcutta : Plot 38/1, Block-GN, Sector IV &V, Salt Lake City, Calcutta- 700 091
Dial : 2357- 3546/3547 , **Fax:** 2357 3881
Delhi Office : 406, Deepali, 92, Nehru Place, New Delhi - 110 019, **Dial:** 26445680 & 26435432 **Fax:** 26416861
Mumbai Office : 56, Mahavir Centre, Sector -17, Vashi , Navi Mumbai - 400 703,
Dial: 27893601, **Fax:** 27893571 **E-mail:** swcbom@bom5.vsnl.net.in
Chennai Office : 81, 3rd Floor, A, Sulochana Terrace,1st Main Road, Gandhi Nagar, Adayar,
Chennai-600 020 **Dial.** 24423731 **Fax.** 24422476
Bangalore Office : 104, Victoria View, Borewel Road, White Field, Bangalore – 560 066.
Telefax : 080 – 3310112, **Email :** swcbangalore@yahoo.co.in

