



ISO 9001:2000
Certified Company

Super Plasticizer for Concrete (ASTM C494 Type D & F)

Zahabiya ConcrePlaste 16/40 is a naphthalene sulphonic acid based, chloride free water reducing admixture for cement conforming to ASTM C494 type D & F with super plasticization properties.

The product has been formulated to provide extended working time of flowing concrete, retarding the initial setting time (ASTM C494 type F) but accelerates the overall set time of cement due to reduced water content. Since the admixture is chloride free, it neither contributes nor accelerates to the corrosion of steel reinforcement, rather reduces the rate of corrosion due to more compact concrete structure. Apart from cement/ concrete, it is equally effective for gypsum, anhydrite and other hydraulic binders.

Variation in slump loss and setting characteristics are a function of the amount of admixture used, cement characteristics and the mix design selected.

Typical Strength Development with Different Dosages of Zahabiya ConcrPlaste 16/40

Compressive Strength (N/mm ²)	Dosage of ConcrePlaste 16/40		
	0%	0.8%	1.25%
1 day	12	22.5	26
7 days	25	31	36
28 days	30.5	40	44

Cement Content 380 Kg/m³
Water /Cement Ratio varied to keep the same Slump as of control.
W/C ratio of Control is 0.45.



APPEARANCE:

Brown translucent liquid with water type consistency. However, it does not change the colour of concrete.

DENSITY:

1.08 kg/litre [ASTM D1475]

NON-VOLATILES:

40% w/w. [ASTM D1644]

CHLORIDE CONTENT:

Nil

SODIUM SULFATE CONTENT:

2.5%

pH:

8.0 [ASTM E70]

AIR CONTENT:

<2.0%

WATER PENETRATION:

<75%

CEMENT FLOW RATE:

>240mm

STEEL BAR CORROSION:

None.

WATER REDUCTION:

Water reduction property depends mainly on dosage and composition of concrete. However, water reduction up to 20 to 22% has been observed.

DOSAGE:

Dosage depends upon the workability required. Normally it ranges between 0.5 to 2% of the weight of cement (0.25kg to 1kg per 50 kg bag of cement). However, the ultimate consumption of this super plasticizer must be checked on site as per directions of the site engineer.

USAGE:

It is highly recommended that Zahabiya ConcrePlaste must be added to the batching / final mix water. DO NOT add the admixture directly to the cement.

APPLICATIONS:

Some of the applications include:

- 1 Pre-cast concretes.
- 1 High strength concrete.
- 1 Industrial slabs.
- 1 Lightweight concrete.
- 1 Pre-stressed concretes.
- 1 Bridges, flyovers, underpasses etc.
- 1 Dams, canals and other watertight structures.

STORAGE/ SHELF LIFE:

Shelf life in closed original containers is one year from the date of manufacturing. Keep original container airtight after every use. Mix well before use.

IMPORTANT NOTICE:

The Information & Data contained herein are correct to the best of our knowledge, tests and experience. These are presented in good faith to the users. The recommendations and suggestions mentioned are made without guarantees or representations as to the results. The Consumer should satisfy himself as to the suitability of the product for the intended purpose and use. WE ASSUME NO LIABILITY for damages of any kind and the user accepts the product 'as is' and without any other warranties, expressed or implied. Our warranty is limited to the replacement of so proved defective Zahabiya original product only, provided used within shelf life as supplied originally.