

KUT PLAST SP 400

Superplasticising, High Range, Water Reducing Admixture

ADM-30-1110



DESCRIPTION

KUT PLAST SP 400 is a chloride free, Superplasticising admixture based on modified sulfonated naphthalene formaldehyde condensate. It is supplied as a brown solution which is instantly dispersible in water.

KUT PLAST SP 400 can provide very high level of water reduction and hence major increase in strength can be obtained coupled with good retention of workability to aid placement.

USES

- **KUT PLAST SP 400** can provide self-leveling concrete practically eliminating the need for vibration during placing.
- **KUT PLAST SP 400** provides excellent workability even at low water/cement ratio.
- **KUT PLAST SP 400** is especially recommended for use in high workability concrete and where fast shutter removal is required.

ADVANTAGES

Increased workability: Reduces placing time, labour and equipment.

High strength concrete: Water reduction gives higher strengths without cement increase or workability loss.

Workability Retention: good workability retention without set retardations

Reduced risk of retardation: Normal set without retardation even if accidentally overdosed.

Reduced permeability: Reduction of water reduces porosity giving improved water impermeability.

Surface finish: Better dispersion of cement particles and increased cohesion minimises segregation and bleeding and gives improved surface finish.

Improved pumpability: Line friction is reduced by increasing workability and cohesion.

Chloride free: Safe in reinforced concrete.

STANDARDS

KUT PLAST SP 400 complies with **BS 5075** and **ASTM C494 Type F**.

TYPICAL PROPERTIES

Calcium chloride content: Nil

Specific gravity: 1.22 – 1.24 @ 20° C.

Air entrainment: Less than 1% additional air is entrained.

Setting Time: Good workability retention upto 3 – 4 hours depending upon dosage used with no set retardation upto 2.5 litres / 100 kg cement dosage..

Chloride content : Nil to BS 5075.

Cement compatibility: Compatible with sulphate resisting and other Portland cements, high alumina cements and cement replacement materials such as PFA, GGBFS and Microsilica.

Durability: Water reduction gives increase in density and water impermeability which improves durability.

INSTRUCTIONS FOR USE

Dosage: The optimum dosage for **KUT PLAST SP 400** should be determined by site trials with actual site conditions. As a guide the dosage is normally:

1.00 - 2.00 litres/100 kg cementitious material, for flowing concrete.

1.50 - 2.50 litres/100 kg cementitious material, for high strength concrete.

Dosage can be from 0.6 litres to 3 litres/100 kg, cementitious material, depending on the requirements of the concrete involved.

Overdosing: An overdose of double the intended amount of **KUT PAST SP 400** will result in very high workability as compared to that normally obtained. Provided that



مصنع التخصصية لكيماويات البناء
SPECIALITIES CONSTRUCTION CHEMICALS FACTORY

Marketed by: Alghanim Specialities Co. W.L.L.
Amghara Industrial Area, P.O.Box: 23595 Safat, 13096 Kuwait
Tel: 1802550 – 400 - Fax: +965 24582548 - Email: sales@spec-kw.com



adequate curing is maintained, the ultimate compressive strength will not be impaired.

Technical Support: 'ASPEC' provides technical support service on mix design, admixture selection, evaluation of trials, dispensing equipment etc. Please contact the Technical Department in these cases.

Curing: As with all structural concrete, normal curing methods apply.

Cleaning: Spillages of **KUT PLAST SP 400** can be removed with water.

PACKAGING

KUT PLAST SP 400 is supplied in 210 litre drums.

STORAGE

KUT PLAST SP 400 should be protected from extremes of temperature. Should the material become frozen, it must be completely thawed and thoroughly mixed before use. **KUT PLAST SP 400** has a minimum shelf life of 12 months provided temperature is kept within the range 5°C to 30°C.

PRECAUTIONS

Health & Safety

KUT PLAST SP 400 is non-toxic. Any splashes to the skin should be washed immediately with water. Splashes to the eyes should be washed immediately with water and medical advice should be sought.

Fire: KUT PLAST SP 400 is non flammable.

ASPEC endeavours to ensure that any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labour involved in the application are beyond our control.

Distributor