## **KUT PLAST SP 500**

# High performance , Water Reducing and Superplasticising Admixture

ADM-41-1110



#### DESCRIPTION

**KUT PLAST SP 500** is a chloride free, Superplasticising admixture based on selected synthetic polymers. It is supplied as a brown solution which is instantly dispersible in water.

**KUT PLAST SP 500** can provide very high level of water reduction upto 25% without loss of workability or to produce high quality concrete of reduced permeability.

#### **USES**

- **KUT PLAST SP 500** can provide self-leveling concrete practically eliminating the need for vibration during placing.
- **KUT PLAST SP 500** provides excellent workability even at low water/cement ratio.
- **KUT PLAST SP 500** produce high strength, high grade concrete by substantial reduction in water resulting in low permeability and high early strength.

#### **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: excellent workability retention

**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 500** complies with **BS 5075** and **ASTM C494 Type G.** 

#### **TYPICAL PROPERTIES**

Calcium chloride content: Nil

**Specific gravity:** 1.240-1.260 at 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 500** should be determined by site trials with actual site conditions.

### As a guide the dosage is normally:

0.80 - 1.80 litres/100 kg cementitious material, for flowing concrete.

1.30 - 2.50 litres/100 kg cementitious material, for high strength concrete.

Dosage can be from 0.6 litres to 3.0 litres/100 kg, cementitious material, depending on the requirements of the concrete involved.





**Overdosing:** An overdose of double the intended amount of **KUT PLAST SP 500** will result in very high workability as compared to that normally obtained. Higher than normal workability, may result in segregation. Provided that 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 500** can be removed with water.

#### **PACKAGING**

**PACKAGING: KUT PLAST SP 500** is supplied in 210 litre drums.

**STORAGE: KUT PLAST SP 500** 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 500** 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 500** 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 500 is non flammable.

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