

VARAPLAST SP 140

HIGH RANGE, WATER REDUCING AND FOR PAVED CONCRETE ROADS / SLABS

DESCRIPTION

VARAPLAST SP 140 is a chloride free, Superplasticising admixture based on selected synthetic polymers. It is supplied as a brown solution which is instantly dispersible in water.

VARAPLAST SP 140 can provide very high level of water reduction and excellent workability.

USES

- ◆ **VARAPLAST SP 140** provides excellent workability even at low water/cement ratio.
- ◆ **VARAPLAST SP 140** is specially recommended for paved concrete roads/slabs.

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 Permeability** : Unique gives chemistry Reduction of water reduces porosity thereby 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

VARAPLAST SP 140 complies with **BS 5075 – 1982** and **ASTM C494 Type G**.

TYPICAL PROPERTIES

- ◆ **Calcium Chloride Content** : Nil
- ◆ **Specific Gravity** : 1.20 at 25° C.
Setting Time : 1 to 2 hours retardation at normal dosage depending on mix design
- ◆ **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, Microsilica and GGBS**

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


INSTRUCTIONS FOR USE

Dosage : The optimum dosage for **VARAPLAST SP 140** should be determined by site trials with actual site conditions.

As a guide the dosage is normally:

0.6 - 2.00 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 **VARAPLAST SP 140** will result in very high workability as compared to that normally obtained. Provided that adequate curing is



maintained, the ultimate compressive strength will not be impaired.

TECHNICAL SUPPORT

'AKARSH' 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.

PACKAGING

VARAPLAST SP 140 is supplied in 250 Kg barrels.

Cleaning : Spillages of **VARAPLAST SP 140** can be removed with water.

Storage : **VARAPLAST SP 140** should be protected from extremes of temperature. Should the material become frozen, it must be completely thawed and thoroughly mixed before use. **VARAPLAST SP 140** has a minimum shelf life of 12 months provided temperature is kept within the range 5° C to 30° C.

PRECAUTIONS

HEALTH & SAFETY

VARAPLAST SP 140 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 : **VARAPLAST SP 140** is non flammable.