

## VARAPLAST AEA

### Air Entraining Admixture For Concrete

#### DESCRIPTION

**VARAPLAST AEA** is a chloride free admixture is supplied as a dark brown solution.

**VARAPLAST AEA** acts on the cement/aggregate particles with the mixing water to produce discrete microscopic air bubbles evenly distributed thorough out the concrete.

#### USES

**VARAPLAST AEA** is used to produce air entrained concrete for increased durability. It protects concrete from damage by frost and de-icing salts and it can also be used where poor aggregates have to be utilised to improve cohesion and workability of the concrete. It will also reduce bleeding, segregation and sand runs.

#### ADVANTAGES

**Protection** : Provides resistance to freezing and thawing cycles.

**Workability** : Improves cohesion, reduces segregation and bleeding.

**Concrete improver** : Gives improved quality with poorly graded aggregates and in low workability concrete, improve surface texture.

#### PERFORMANCE STANDARDS

**VARAPLAST AEA** complies with BS 5075: Part 2 and ASTM - C260.

#### TYPICAL PROPERTIES

**Calcium Chloride Content** : Nil

**Specific Gravity** : 1.01 to 1.04 at 20° C

**Setting Time** : Insignificant change at normal dosage.

**Compatibility** : Compatible with all Portland cements.

#### EFFECT OF MIX DESIGN ON AIR CONTENT

Factor and change	Air Content Change
Sand Content + 10%	Plus 1 to 2%
Fine Sands	Decrease
Cement Content +30%	Minus 1 %
Fine Cement	Decrease
PFA - Increase	Decrease
Water - Decrease i.e., in low workability concrete	Decrease
Temperature - increase of 20° C	Halved

#### INSTRUCTION FOR USE

**Dosage** : The optimum dosage for **VARAPLAST AEA** should be determined by site trials with the particular concrete mix under prevailing ambient conditions. As the general guide the dosage is normally: 0.05-0.3 kg/100 kg cement.

The dosage should be checked at least daily to ensure that the air entrainment is within specified limits.

**VARAPLAST AEA** should be added to the concrete mixer with the water using a suitable dispenser.

**Compatibility** : **VARAPLAST AEA** is generally compatible with other **AKARSH** admixtures, but it is recommended that all admixtures be added to concrete separately.

**Overdosing** : Overdosing will lead to excessive air entrainment and reduced compressive strengths.

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



**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.

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

**PACKAGING**

**VARAPLAST AEA** is supplied in 50kg and 200kg drums.

**Storage :** **VARAPLAST AEA** should be stored at temperatures between the range of 5° C to 30° C should the material become frozen, it must be completely thawed and thoroughly mixed before use. **VARAPLAST AEA** has a minimum shelf life of 12 months when stored as advised.

**PRECAUTIONS**

**HEALTH AND SAFETY :**

**VARAPLAST AEA** is alkaline. Wear gloves and goggles. 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 AEA** is non-flammable.