

# Plastit<sup>®</sup> AEA

## Air entraining agent

### Uses

To produce air entrained concrete for increased durability, resistant to damage by frost and de-icing salts, and to improve the cohesion and workability of concrete mixes where poorly graded aggregates must be used, and in any situation where bleeding, segregation or sand runs occur. Typical applications include:

- Concrete roadways
- Bridge decks
- Airport runways and taxiways
- Other extensive areas of concrete exposed to potential frost damage

### Advantages

- Provides concrete with resistance to freezing and thawing.
- Improves cohesion, reduces segregation and bleeding.
- Gives dense, uniform, close textured surface to concrete.
- Excellent air bubble stability.
- Consistent performance, even with changes in aggregate quality and ambient temperature.
- Effective in low workability concrete.
- Suitable for use in Middle East conditions.

### Standards compliance

Plastit AEA complies with BS 5075: Part 2 and with ASTM C260 as an air entraining agent.

### Description

Plastit AEA is a chloride-free admixture based on synthetic surfactants and is supplied as a dark brown solution. Plastit AEA acts on the interface of the cement/aggregate particles and mixing water to produce microscopic air bubbles evenly distributed throughout the concrete.

### Typical dosage

The optimum dosage Plastit AEA to meet specific requirements should always be determined by trials using the materials and conditions that will be experienced in use. The normal dosage range is between 0.2 to 0.6 kg/100 kg of cementitious materials.

### Properties

Appearance	Brown Liquid
Specific gravity	1.02 gr/cm <sup>3</sup> at 20°C
Chloride	Nil to BS5075
Air entrainment	Typically between 2% and 6% additional air is entrained at normal dosages.
Alkali content	Typically less than 5.0 g. Na <sub>2</sub> O equivalent/liter of admixture. A fact sheet on this subject is available.

### Instructions for use

#### Compatibility:

Plastit AEA is compatible with other CAPCO admixtures in the same concrete mix. All admixtures should be added

<http://capco.am/products/concrete-admixture/>

to the concrete separately and must not be premixed together prior to addition. The performance of concrete containing more than one admixture should be assessed by trial mixes.

Plastit AEA is suitable for use with all types of Portland cements, SRC cements and cement replacement materials such as PFA, GGBFS and micro silica.

The use of a combination of admixtures in the same concrete mix and or cement replacements may alter the setting time. Trials should always be conducted to determine such setting times.

#### Dispensing:

The correct quantity of Plastit AEA should be measured by means of a recommended dispenser. The admixture should then be added to the concrete with the mixing water to obtain the best results.

### Packaging

Plastit AEA is available in 20 kg containers and 200 kg drums.

### Storage

Plastit AEA has a minimum shelf life of 12 months provided the temperature is kept within the range of 5°C to 35°C. Should the temperature of the product fall outside this range then contact CAPCO for advice.

**Freezing point:** Approximately -2°C

### Precautions

#### Health and safety:

Plastit AEA does not fall into the hazard classifications of current regulations. However, it should not be swallowed or allowed to come into contact with skin and eyes. Suitable protective gloves and goggles should be worn. Splashes on the skin should be removed with water. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting.

#### Fire:

Plastit AEA is non-flammable.