AEA PLAST

TECHNICAL DATA SHEET

AIR - ENTRAINING ADMIXTURE FOR CONCRETE AND MORTAR

Description

AEA PLAST is a chloride free air entraining admixture based on neutralised vinson resin. It is supplied as a translucent to colourless solution which instantly disperses in water. AEA PLAST acts at the interface between the mixing water and cement/aggregate particles to produce microscopic air bubbles, which are evenly distributed throughout the concrete. The entrained air enhances durability by providing protection against the rapid temperature changes found in freezing and thawing conditions and with the use of de-icing salts.

AEA PLAST is an air-entraining admixture for concrete and mortar which creates highly stable micro air bubbles that are strong, small and closely spaced.

Uses

- To entrain and retain air in concrete
- Low slump concrete
- Flowable concrete even having low past content
- High temperature concrete
- Concrete with extended working times
- Lightweight and pre-stressed concrete
- Imparting workability to lean harsh mixes
- Reducing bleeding caused by gap grading of aggregates in the concrete materials

Advantages

The use of AEA PLAST to entrain optimum air content in concrete results in the following improvements in concrete quality:

- Increased freeze / thaw resistance
- Increased resistance to scaling
- Improved air-void system in harden concrete
- Reduced permeability - increased water tightness
- Improved plasticity and workability
- Reduced segregation and bleeding
- Greatly improved stability of air entrainment

Standard Compliances

AEA PLAST complies with BS 5075 Part 2, BS 4887 Part 1, ASTM C260

Characteristics

Form	: Liquid
Colour	: Translucent to colourless
Relative Density	: 1.015± 0.01 at 25^0C
pH	: Min. 6
Chloride ion content	: Nil (As per BS 5075 Part I)

Doses

Optimum dosage of AEA PLAST should be determined by site trials only using the materials and conditions that will be experienced in use.
However, as a guide, a dosage range of 0.05 to 1% on cementitious material is recommended. As a starting point use 0.1% on cementitious material and then adjust the dose on the basis of results obtained.
Dosages outside of the recommended range may be required. In such cases, contact our local representative.

Direction for Use

AEA PLAST is a ready-to-use liquid admixture. For maximum dispersion throughout the mix, measured quantity of AEA PLAST should be added into the mixer at the same time as the mixing water. The plasticizing effect and water reduction will be higher when the admixture will be added to the damp concrete by adding 60 to 80% of the mixing water in it.

The addition of AEA PLAST to dry aggregate or cement is not recommended.

Compatibility

AEA PLAST can be used with all types of cements except high alumina cement. AEA PLAST is also compatible with slag and pozzolans such as fly ash and silica fume. It is compatible with PC based superplasticizers, Sulphonated Napthalene based superplasticizers and ligno- sulphonates based plasticizers. Site trials should be carried out to optimize the dosages.

Durability

Increased freeze / thaw resistance and reduced permeability - increased water tightness thus, enhancing durability of concrete.

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Corrosion

It neither initiates nor promotes corrosion as it does not content any harmful chemicals. Rather it reduces the risk of corrosion of reinforcement or other embedment, as it reduces permeability - increased water tightness thus, enhancing durability of concrete.

Technical Support

FIRST CHOICE SPECIALITY CHEMICALS PRIVATE LIMITED provides technical advisory services for on-site assistance and guidance on mix design, optimum dosage evaluation of trials.

Packaging

AEA PLAST is supplied in 20 kg, 200 kg drums or in bulk on request.

Storage and Shelf life

AEA PLAST must be stored where temperatures do not drop below +5°C. If product has frozen, thaw at +5°C or above and completely reconstitute using mild mechanical agitation. Do not use pressurized air for agitation. Store under cover, out of direct sunlight and protect from extremes of temperature.

Shelf life is 12 months when stored as above.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult our local FIRST CHOICE SPECIALITY CHEMICALS PRIVATE LIMITED representative.

Fire

AEA PLAST is water based and non-flammable.

Cleaning of Tools

Clean all tools and application equipment with water immediately.

Safety Precautions

AEA PLAST does not fall into the hazard classifications. However, it should not be swallowed or allowed to come into contact with the 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 the eyes it shall be rinsed immediately with plenty of water and medical advice sought immediately. If swallowed, medical attention shall be sought immediately - Vomiting should not be induced.

Note

All Technical Data Sheets are updated on regular basis; it is the user's responsibility, to obtain the most recent issue.
Field services where provided, does not constitute supervisory responsibility, for additional information contact our local FIRST CHOICE SPECIALITY CHEMICALS PRIVATE LIMITED representative.

Disclaimer

Whilst 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.