



MC-Plast AEA

Chloride-free, Water Reducer and Air Entraining Agent

Product Properties

- Contains no chloride
- Improves workability, thus improving compaction
- Improves Plasticizing properties, cohesion and in resisting freezing and thawing
- Reduction in amount of mixing water required
- Improves compaction
- Reduces water cement ratio, thereby increasing strength
- Increases resilience of mortars
- Resistance to attack by deicing salts and freeze-thaw cycles
- The concrete produced with **MC-Plast AEA** is homogeneous and free from bleeding
- Air entrainment of microscopic bubbles assists in producing cohesive concrete which reduces segregation

Areas of Application

- Suitable for site produced and ready mix concrete
- Suitable for light weight aggregate concrete
- **MC-Plast AEA** is particularly suited for pre-cast industries
- **MC-Plast AEA** is specially suited for preparation of plaster and masonry mortars
- Addition of **MC-Plast AEA** avoids honey combing
- It can be effectively used as an admixture for concrete prepared at site, ready mix concrete and light weight aggregate concrete

Application Notes

General

MC-Plast AEA is high performance, chloride-free water reducing cum air entraining agent for mortars, Concrete and lightweight aggregate concretes. **MC-Plast AEA** is a concrete plasticizer and water reducing agent used to produce concrete of good workability. **MC-Plast AEA** is suitable for both, site produced and ready mix concrete, where high workability is required.

The introduction of **MC-Plast AEA** brings about improvement in workability on account of its plasticizing properties, cohesion and in resisting freezing and thawing cycles by the entrainment of innumerable microscopic air bubbles of suitable size and spacing, evenly distributed throughout the matrix.

MC-Plast AEA lowers the surface tension of the mixing water. As a result there is considerable reduction in the amount of mixing water required. The plasticizing nature of air entrainment assists in producing a dense, uniform, close textured surface, free from gravel nests and honeycombing.

It is compatible with most types of cements, sands and avoids efflorescence. Also, addition of **MC-Plast AEA** increases resistance to attack by deicing salts and freeze thaw cycles.

The concrete produced with **MC-Plast AEA** is homogenous and free from bleeding and also the use of **MC-Plast AEA** reduces water cement ratio, thereby increasing strength.

Instructions for Use

MC-Plast AEA should be used added during the mixing operation. It is necessary to carry out a preliminary site test to determine the amount of air entrained in the fresh concrete or mortars. The dosage of **MC-Plast AEA** depends upon the flow and air entrainment required; Preliminary trials should be conducted at site to determine the optimum dosages.

After addition of the **MC-Plast AEA**, the concrete or mortar should be thoroughly mixed so as to achieve a uniform consistency and homogeneity.

Further Instructions / Precautions

Usage Options

MC-Plast AEA is compatible with most of the other **MC-Admixtures** and this property can be taken advantage of to produce desired results. Especially when high early strength concretes having high resistance against deicing salts are desired as in the case of road concretes, a combination of plasticizer **Zentrament FBV** with **MC-Plast AEA** produces excellent results. It can also be used in combination with all **MC-Retarders**.

When combining **MC-Schnell OC** with **MC-Plast AEA** the admixing operation should be: **MC-Plast AEA** followed by **MC-Schnell OC**. When a combination of **MC-Retarders** with **MC-Plast AEA** is desired, the **MC-Retarders** should be added prior to addition of **MC-Plast AEA**. This order of addition will guarantee a good stabilization of micropores entrained by **MC-Plast AEA**.

Air Entrainment by use of MC-Plast AEA



Technical Data For MC-Plast AEA

Characteristic	Unit	Value	Comments
Minimum application temperature	°C	20°C	
Mixing ratio	% by weight of cement	0.15% to 0.30%	Depends on application

Product Characteristics for MC-Plast AEA

Type of Product	Chloride free, Water reducing and Air Entraining Agent
Form	Liquid
Colour	Pale yellowish to brown
Shelf Life	12 Months from date of Manufacture
Delivery	230 Kg drums and 30 Kg pails
Storage	In Unopened Packaging. Protect from Rain, Direct Sunlight, Heat and Frost
Disposal	Empty packs completely and dispose off carefully to protect our Environment

Note: The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees, which may differ from the data contained in our information sheets, are only binding if given in written form. The accepted engineering rules must be observed at all times. E. & O.E.

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