

## **FEBCRETE AEA** **NEW FORMULAE**

### **Description:**

FEBCRETE AEA is a light blue aqueous solution, which reduces the surface tension of mixing water giving it a stronger wetting action. The normally entrapped air within the concrete is broken up to produce microscopic air cells. These air cells, impart a high degree of plasticity to the concrete in the wet state, remaining permanently within the concrete increasing resistance to sulphate attack and water penetration. FEBCRETE AEA conforms to Australian Standard AS 1478.

### **Primary Uses:**

- For air entrained concrete
- To increase durability of concrete by increasing resistance to sulphate attack and freeze thaw.
- To reduce bleeding in concrete and improve cohesive properties.

### **Typical Applications:**

- In roadwork and airport runways where increased durability is required.
- In mass concrete such as dams, where lean mixes are used, to improve and ease placing, compaction etc.
- In road and bridge works.

### **Advantages:**

- Enables the water/cement ratio to be reduced.
- Increases workability.
- Increases the impermeability of the hardened concrete.
- Reduces segregation.
- Reduces the time of placing and consolidating.
- Improves surface finish.
- Increases frost resistance
- Reduces bleeding.
- Increases resistance to aggressive action of sulphate waters and salts.

### **Composition:**

Synthetic aqueous solution.

### **Properties:**

Typical properties of FEBCRETE AEA are as follows:

Colour	Light Blue
Specific Gravity	1.015 +/- .02
Air Entrainment	See dosage
Chloride Content	Nil.
Nitrate Content	Nil.
PH Value	9.0 +/- 1
Non-Volatile Solids Content	WW 6.5 +/- 1%
Storage life	18 months from date of manufacture in sealed containers.
Flashpoint	None.

**Directions for Use:**

FEBCRETE AEA should be added to the mix in such quantities as will produce the desired effect in the concrete. There cannot be a "normal recommended" dosage in the way that applies to the great majority of admixtures.

Once, however, the correct dosage or a particular condition has been established by trial, no difficulty should be experienced in maintaining the air content within the accepted tolerance (usually +/- 1%).

In the case of FEBCRETE AEA the required amount of air is generally obtained by the addition of about 20-100mL of FEBCRETE AEA for each 100kg of cement.

Effects of Over-Dosage:

Over-dosage of FEBCRETE AEA will result in the following:

- Increase in air content, increase in workability, lower strength.

**Compatibility:**

FEBCRETE AEA is compatible with all types of Portland Cement including Sulphate Resisting.

FEBCRETE AEA should not be pre-mixed with other admixtures. If other admixtures are to be used in concrete containing FEBCRETE AEA they should be dispensed separately.

**Packaging:**

Available in 1, 5, 20, 200 litre containers.