# **POLY CRETE F 50**

Concrete Super plasticizer & Water Reducing Concrete Admixture

### **Product Description**

POLY CRETE F 50 is water-reducing concrete admixture which is formulated to produce flow able concrete with a very high physical and mechanical property. It is based on a blend of synthetic polymers that aggressively disperses cement particles which tend to agglomerate, enabling the mixing water to perform more efficiently and contains materials that achieve early strength to concrete.

## **Typical Application**

Where excellent early development strengths are required as well as ultimate strengths.

- To increase flow ability of concrete during placing without increasing water content.
- To improve durability of concrete by reducing permeability with increasing early strength gained.

## **Product Features**

- Early strength development seven days results are obtained after three days, twenty eight days results are obtained after seven days.
- Increases density and reduces porosity to have an improved water penetration resistance concrete.
- Reduces segregation, bleeding & increases mix cohesion.
- Enables recast concrete units to be demoulded quickly.
- Cement saving are possible strength decrease or workability loss.
- High workability concrete is produced at normal cement content.
- Non toxic and non flammable.

### **Standards**

**POLY CRETE F 50** complies with ASTM C -494 Types A and F, BS 5075 Part

### **Properties**

#### Colour

Brown liquid.

### **Specific Gravity**

1.19 at 20° C.

#### Air Entrainment

+1 %

#### **Chloride Content**

Nil.

#### **Setting Time**

Will not be affected at the recommended dosage.

#### Permeability

Improves waterproofing properties of concrete and increases its density.

#### **Compatibility**

**POLY CRETE F 50** can be used with all types of Portland cement including Sulphate Resisting Cement (S R C).

It is also compatible with other **POLYCOO** admixtures provided that the two admixtures are added separately to the mix.

Please consult our technical department when mixing.

#### Water Reduction

A reduction up to 15 % can be achieved; depending on material used & mix design and ambient temperature.

#### **Cohesion**

Dispersion of cement particles will increase cohesion in flowing and plastic consistency.

#### **Compressive Strength**

The addition of **POLY CRETE F 50** improves the compressive strength of concrete at the same cement content and slump. It also increases the rate of strength gain.

#### Workability

**POLY CRETE F 50** will produce free flowing concrete without reducing the free water content.

#### **Durability**

The increase in density due to the addition of **POLY CRETE F 50** improves resistance of concrete to aggressive agents

### **Curing**

Recommend the use of **POLY CURE RB** for curing.

(See separate data sheet)

### **Dosage**

Flowing concrete

0.50 to 2.50 lit. per 100 kg. cement.

High strength concrete

2.00 - 3.00 lit. per 100 kg. cement.

**POLY CRETE F 50** should be added to the concrete mix during the mixing cycle or at point of placing on site.

### **Overdosing**

An overdose of double recommended amount of **POLY CRETE F 50** will result in very high workability and some retardation will occur. The ultimate compressive strength of the concrete will not be impaired.

## **Cleaning**

Spillage can be removed with water.

## **Packaging**

**POLY CRETE F 50** is supplied in 220 lit. Drums For bulk deliveries, 1000 lit. Containers are available.

#### **STORAGE**

**POLY CRETE F 50** should be stored in shaded areas.

#### **Shelf Live**

One year when stored as recommended.

### **Health and safety**

- POLY CRETE F 50 is non flammable and non toxic.
- Any splashes on skin should be washed with water.
- Seek medical assistance in case of contact with eyes, after washing it with running water.

### Guarantee / Warranty

We warrant our products to be of good quality and manufactured to rigid standards. This warranty is in lieu of any and all other warranties expressed or implied.

This data sheet is published for information only. It is believed to be correct but no liability is accepted for it or the suitability of the product for any particular purpose.

**POLYCOO** services are free and the company dose not accepts liability for any loss arising from it.

#### **Technical Services**

For any further technical advice and recommendation for the use of all **POLYCOO** products, please consult the nearest **POLYCOO** technical office.



Under technical collaboration with

# Polycoo Industries Ltd.

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