

# Arcrete G180

## High-Range Water Reducer with Set Retarding Effect

ASTM C494 Type G and BS EN 934-2

### Description

**Arcrete G180** is a High-Range Water Reducer developed to enhance and improve the slump retaining properties of concrete, whilst providing improved ultimate compressive strengths also it improves the flow and strength development of concrete as it is highly flexible and effective over a wide range of cement contents and types.

The product is especially beneficial in hot climate conditions.

### Typical Properties

**Appearance:** Brown Liquid

**Specific Gravity:** 1.21 at 20°C

**Air Entrainment:** 1.0% Max from Control Mix.

**Chloride Content:** Nil according to BS 5075

### Compatibility

#### With Cements:

**Arcrete G180** is compatible with all Portland, Pozzolanic and blast furnace cements. It is also compatible with concrete containing fly ash and silica fume.

#### With Other Admixtures:

**Arcrete G180** should not be premixed under any circumstances with other admixtures. The performance of the product will be affected by the presence of other chemical admixtures. We recommend Arkaz be contacted for Advice in these circumstances.

### Addition Rates

#### Range:

**0.5%-2% (v/w) by wt. of cement**

The optimum dosage is assessed after preliminary trials depending upon the actual mix constituents and specifications required.

Addition rates outside of the recommended dosage range may be used for special concrete applications. In such circumstances, it is important to conduct preliminary trials on the actual mix constituents to assess the effect on the properties of the concrete at the dosage level specified.

### Effects of Overdosing

Serious overdosing of **Arcrete G180** will generally produce a concrete mix of even greater workability, set retardation and a slight increase in air entrainment may be noticed. In SRC mixes and in cooler weather, set retardation will be further increased. If Intentional or accidental increased above the recommended addition rates are encountered, care must be taken to allow for the effect on the stripping time of formwork. In such cases, however, provided the concrete is properly cured the ultimate strength will generally be higher than for normal concrete.

### Dispensing

It is preferable that **Arcrete G180** should be introduced into the mixer by means of independent automatic dispensing equipment. Such equipment or advice on dispensing can be obtained from Arkaz.

## Method of Use

**Arcrete G180** is supplied ready for use.

It should be added to concrete mixes either during the mixing cycle or at the same time as the water, or alternatively it should be added in its supplied form to a normal concrete mix a few minutes before the pour is made.

In the latter case, further mixing should be provided to ensure complete dispersion.

## Health and Safety

For further information, Check the Material Safety Data Sheet please consult Arkaz

## Technical Service

The technical service department of Arkaz Alsharq Building Materials is available to assist in the correct and best use of our products. These resources and advice are at your disposal entirely without obligation. Please contact:

Arkaz AlSharq Building Materials  
Dammam 2nd Industrial Area - Road 135  
PO Box 2572, Khobar, 31952  
Saudi Arabia  
Tel: 013 808 6970  
Fax: 013 812 6541  
[info@arkaz.com](mailto:info@arkaz.com)  
[www.arkaz.com](http://www.arkaz.com)

## Storage

**Arcrete G180** should be stored in original containers or suitable closed tanks preferably away from extremes of temperature. The product should be kept in shaded storage at all times.

### Storage Life in Manufacturer's Drums:

12 months from date of manufacture.

### Storage Life in Bulk Storage:

12 months from date of delivery.

## Packaging

**Arcrete G180** is supplied in 210 non-returnable drums.

Alternatively, 1,000 liter totes and bulk deliveries can be arranged.

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