# **Arcrete G1171**



High-Range Water Reducing Concrete Admixture combining both enhanced consistence Retention and Rheology performance for Hot Weather Ready-mix Concrete Applications

## **DESCRIPTION**

**Arcrete G1171** is a High-Range Water Reducer developed to enhance and improve the slump retaining properties of concrete, whilst providing improved ultimate compressive strengths. It can be used at a range of dosage levels to:

- · Reduce water content
- Reduce Cement Content
- Increase compressive strength
- Increase workability

**Arcrete G1171** is highly flexible and effective over a wide range of cement contents and types. The product is especially beneficial in either high strength or high durability concrete mix designs in hot climatic conditions. **Arcrete G1171** Complies to ASTM C494 Type G, ASTM C1017 Type II and BS EN 934-2.

## TYPICAL PROPERTIES

**Appearance:** Dark Brown Liquid **Specific Gravity:** 1.21 ± 0.02 at 25°C

Chloride Content: Nil according to BS 5075

## COMPATIBILITY

#### With Cements:

**Arcrete G1171** can be used with most types of Portland cements as well as Pozzolanic Cements, Ground Granulated Blast Furnace Slag (GGBFS), Micro Silica and Fly Ash. For use with other special cements, we recommend you contact Arkaz Technical Department.

## With Other Admixtures:

**Arcrete G1171** performance of the product will be affected by the presence of other chemical admixtures within the same mix. We recommend Arkaz Technical Department be contacted for Advice in these circumstances.

## **ADDITION RATES**

### Range:

0.2%-2.5 % (v/w) by wt. of cement 200 ml - 2500 ml per 100 kg cement

As with most products of this type of the magnitude of the effect obtained with **Arcrete G1171**, is governed by the quantity of product used, water-cement ratio, and the specific nature of the concrete and constituent materials.

It is necessary, therefore, to assess performance under site conditions using actual materials to determine optimum performance and dosage and effect on both plastic and hardened concrete properties such as cohesiveness, workability retention, setting characteristics, rate of early strength gains, ultimate strength, and shrinkage where these are of importance.

# **EFFECTS OF OVERDOSING**

Serious overdosing of **Arcrete G1171** 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.

# DISPENSING

It is preferable that **Arcrete G1171** 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 G1171** 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.



## **PACKAGING**

Arcrete G1171 is supplied in 210 non-returnable drums. Alternatively, 1,000-liter totes and bulk deliveries can be arranged.

## **HEALTH AND SAFETY**

For more Safety information you can check Product Material Safety Data Sheet, drop an email to Arkaz Concrete Doctor at ConcreteDoctor@arkaz.com or Contact Arkaz Technical Department.

## **STORAGE & SHELF LIFE**

Arcrete G1171 should be stored in original containers or suitable closed tanks preferably away from extremes of temperature. The product should always be kept in shaded storage.

Storage Life in Manufacturer's Drums: 12 months from date of manufacture.

Storage Life in Bulk Storage: 12 months from date of delivery.

#### TECHNICAL SERVICE

The technical service department of Arkaz 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:

concretedoctor@arkaz.com

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