

# Arcrete MS920

## Mineral Admixture for Concrete

### Product Description

**Arcrete MS920** is composed of silicon dioxide (SiO<sub>2</sub>), collected from silicon metal and ferrosilicon produced, as unidentified form. Color of Micro-Silica is from gray white to gray. Arcrete MS920 is very fine non-crystalline silica produced in electric arc furnaces as a by-product of the production of elemental silicon or alloys containing silicon. It is usually a gray colored powder, somewhat like Portland cement or some fly ashes.

### Uses

**Arcrete MS920** improves the compressive strength, flexible strength, and impermeability, anti-septic, wear proof and shock resistance etc. of concrete obviously. It is used to avoid segregation and weeping, as it increases the pumpability of concrete. It Extends the service life of concrete, especially in Sulphate, chloride and high dampness etc. environmental extremes. It reduces the falling ash of spray concrete and grouting. It is the indispensable material of high strength concrete., also it decreases alkali aggregate reaction effectively. Improve the compactness of casting refractory materials.

### Typical Properties

SiO <sub>2</sub> Content	≥ 92.0
Moisture (%)	≤ 3
Loss on Ignition (%)	≤ 6
Pozzolanic Activity index (%)	>105@7d
Retained on 45um sieve (%)	≤ 10
Specific Surface Area (m <sup>2</sup> /kg)	15,000–25,000

### Advantages

**Arcrete MS920** is very fine non-crystalline silica produced in electric arc furnaces as a by-product of the production of elemental silicon or alloys containing silicon. It is usually a gray colored powder, Arcrete MS920 is densified dry Micro-Silica with a typical bulk density of 500-700 kg/m<sup>3</sup>. It is about twice the bulk density of undensified dry silica fume, which is more economical for transportation, as its higher density allows bulk handling methods, and reduced shipping cost.

The chemical composition and physical properties are regularly tested in accordance with Standard ASTM C1240.

### Addition Rates

Arcrete MS920 dose on cement weight: 5 - 15 % (5 to 15 kg per 100 kg of cement), depending on the required effects.

### Packaging & Handling

**Arcrete MS920** is generally considered a nuisance dust. Use and handling of silica fume does not represent a health risk when normal safety rules are observed. Direct contact may cause irritation of eyes. Prolonged contact may cause skin irritation. Inhalation may cause respiratory irritation resulting in coughing and shortness of breath. This product may be harmful if swallowed. Do not get in eyes and avoid prolonged skin contact. Do not take internally. Wash thoroughly with water after handling.

## Compatibility with Admixtures

**Arcrete MS920** is compatible with all types of Portland Cements, SRC cements and other cementitious materials including PFA, GGBS and lime stone powder , also it is compatible with all Arkaz concrete admixtures. The addition of all Arkaz admixtures should be added separately to concrete and should not be mixed prior to the addition.

## Health and Safety

For further information, Check the Product Material Safety Data Sheet or 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:

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