

# Strumin® Complex

## Silica Fume Gel Admixture

### Uses

- Any construction project requiring the protection provided by highly durable, low permeability concrete
- Projects requiring high-strength/high-performance concrete
- Steel-reinforced concrete structures or wet shotcrete applications exposed to deicing or airborne salts

### Advantages

- Increased concrete service life
- Increased strength
- Increased modulus of elasticity
- Reduced permeability thereby increasing durability
- Increased resistance to sulfate attack
- Increased resistance to alkali-silica reactivity

### Standards compliance

Strumin Complex conforms with ASTM C1240, Standard Specification for Silica Fume used in Cementitious Mixtures.

### Description

Strumin Complex admixture improves the rheological properties of concrete. It is based on a highly pozzolan mineral admixture to produce extremely strong, durable concrete. These include silica fume and Super plasticizer.

### Typical dosage

The optimum dosage of Strumin Complex to meet specific requirements should always be determined by trials using the materials and conditions that will be experienced in use. The normal dosage range is between 4 to 10% by mass of cementitious material.

### Properties

Appearance	Gray Gel
Specific gravity	1.3 ± 0.05 gr/cm <sup>3</sup> at 20°C
Chloride	Nil to BS5075

### Instructions for use

#### Compatibility:

Strumin Complex is compatible with other STRUMIX admixtures used in the same concrete mix. All admixtures should be added to the mix separately and must not be mixed together prior to addition. The resultant properties of mixes containing more than one admixture should be assessed by the trial mix procedure recommended on this data sheet.

#### Dispensing:

The correct quantity of Strumin Complex should be measured by means of a suitably accurate device; and then added to the concrete during the mixing process either by hand, or mechanically.

#### Curing:

As with all structural concrete and sand : cement mixes, good curing practice should be maintained, particularly in situations where an overdose has occurred. Water spray, wet Hessian or a Strucure WS spray applied curing membrane should be used.

### Limitations

The use of a suitable Super plasticizer with this product is recommended.

### Packaging

Strumin Complex is available in 25 kg pails.

### Storage

Strumin Complex has a minimum shelf life of 6 months at 35°C if kept in a dry store in the original, unopened packs. The shelf life will be reduced at higher ambient temperatures.

### Precautions

#### Health and safety:

Strumin Complex is alkaline and should not come into contact with skin and eyes. Avoid inhalation of dust during mixing. Gloves, goggles and dust mask should be worn. If contact with skin occurs, wash with water. Splashes to eyes should be washed immediately with plenty of clean water and medical advice sought.

#### Fire:

Strumin Complex is non-flammable.

