# **Product Information**

# MicroVolumen™ Expansive CSA

### **Product Description:**

MicroVolumen™ Expansive CSA is a Calcium-Sulfo-Aluminate (CSA) cement produced from a special clinker, developed to reduce and compensate the hydraulic shrinkage of cement-based mortars and concrete. MicroVolumen™ Expansive CSA reacts with water, producing fine crystal needle-like structures of ettringite. During the hardening phase of the cement hydration, these will grow together to form larger crystals, resulting in a volume increase (expansion). This structure will counteract the shrinkage by chemical hydration and the shrinkage due to the drying of the concrete, resulting in reduced shrinkage compared to other cements.

MicroVolumen™ Expansive CSA provides reduced shrinkage, higher durability, improved water impermeability, increased mechanical strength properties, chemical pre-stressing and excellent adhesion to substrates and reinforcement.

## **Applications:**

MicroVolumen™ Expansive CSA is suitable for use in the following:

- Self-levelling underlayment

- Floor toppings

- Concrete counter tops

- Repair mortars

- Surface coatings

- High density mortars and concrete

#### **Specifications:**

Parameters (units)	Specifications
Appearance	Off-white, free flowing powder
Specific density (g/cm³)	Approx. 2.86
Specific surface, Blaine (cm²/g)	Approx. 3700
Loose density (g/cm³)	0.8 - 0.9
Tapped density (g/cm³)	Approx. 1.5
Loss on ignition (%)	< 3
SiO <sub>2</sub> (%)	1 - 2
Al <sub>2</sub> O (%)	12 - 15
Fe <sub>2</sub> O <sub>3</sub> (%)	0.3 - 0.8
CaO (%)	50 - 54
MgO (%)	0.4 - 2.3
Na <sub>2</sub> O (%)	< 0.75
SO <sub>3</sub> (%)	27 - 31
Cl (%)	< 0.05

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#### Packaging:

Material is available in 25 kg bags. Further packaging options may be available upon enquiry.

#### Storage:

Product should be stored in a dry place in sealed, original packaging away from direct sunlight.

#### Safety:

For further safety information refer to product SDS available from your Bisley International contact.

Disclaimer: This document is for information purposes only. Customers are responsible for testing and confirming the suitability of this product in their application. To the extent permitted by law, no warranty as to merchantability or fitness of purpose, expressed or implied, is made.

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