

MICROCEM®

Controlled fineness cement



bringing materials to *life*™

The MICROCEM® range of controlled fineness cements is produced by finely grinding Portland cement clinker with small quantities of set regulating additives. They are produced in a controlled factory environment at our Barnstone works under an ISO 9001 accredited Quality Management System.



Applications

MICROCEM® 550 is suitable for a range of applications, such as, cement-based repair compounds, injection grouting and soil stabilisation. Four MICROCEM® products are available:

- **MICROCEM 500®:** Fine cement, combining high fineness with good early strength development. Suitable for use in cement-based adhesives, repair compounds, flowing screeds and grouts
- **MICROCEM® 650:** Superfine cement (finer than MICROCEM®) suitable for injection into joints, cracks, fissures and soils to produce a water-tight mass of grouted rock or soil
- **MICROCEM® 650 SR:** Similar fineness to MICROCEM® 650, but slower setting. Particularly suited for use in hot climates
- **MICROCEM® 900:** An ultrafine product (finer than MICROCEM® 650), suitable for injection into hard rock, tight joints and fissures

Properties

The features of the MICROCEM® range of cements include:

- Based on Portland cement clinker with carefully selected set regulating admixtures. Contain no other additions
- Controlled high fineness and narrow particle size distribution
- Low bleed
- Excellent penetration and waterproofing, particularly in tight fissures and low porosity soils
- Controlled setting
- High ultimate strength
- Good long-term durability
- Compatible with most admixture types
- Can replace chemical grouts in most situations
- Can be used with standard cement injection equipment
- No hazardous fumes leading to a safer working environment

Conditions of Use

- MICROCEM® based grout should always be mixed in a high efficiency mixer (preferably a colloidal mixer)
- Do not over mix as this may result in increased grout temperatures and premature setting
- Keep under constant agitation prior to injection, but do not keep in agitator for more than 30-40 minutes
- Open time may be increased with proprietary admixtures (use in accordance with admixture manufacturers instructions)

Please note:

- MICROCEM® is manufactured from natural materials and slight differences in colour may be observed
- MICROCEM® should be used by operatives familiar with the characteristics of the material and its application methods
- Lafarge cement UK cannot be held responsible for any problems associate with incorrect specification or poor workmanship

Availability

MICROCEM® is available in bulk tankers, 20 kg plastic bags or in 1000 kg bags from our Barnstone works. Details of availability can be obtained from the contacts listed below.

Storage

MICROCEM® is packed in Lafarge's innovative plastic packaging and can be stored, unopened, in either indoor or

outdoor conditions. 1000 kg bags should be stored clear of the ground and in cool dry conditions. Information on the maximum storage period can be found on the bag.

Technical Support

Further information or specification advice on MICROCEM® and the full range of Lafarge cements can be obtained from the contacts listed below.

Health and Safety

Contact between cement powder and body fluids (e.g. sweat and eye fluids) may cause irritation, dermatitis or burns. Cement is classed as an irritant under the Chemicals (Hazard Information and Packaging) Regulations. For further information, including the control of hexavalent chromium, refer to the Lafarge Cement Health and Safety Information Sheet for Portland cements.

Typical Properties (For guidance only, not to be used for specification purposes)

Property	Units	MICROCEM 550	MICROCEM 650	MICROCEM 650 SR	MICROCEM 900
Initial Setting Time (BS EN 196-3)	(min)	85 to 220	N/A	360 max	N/A
Initial Setting Time (@1:1 water:cement)	(min)	N/A	50 to 180	N/A	50 to 150
Bleed	(%)	< 3	< 3	< 3	< 3
Typical Particle Size Distribution					
D ₉₅	(µm)	30	20	20	12
D ₅₀	(µm)	8	6	6	3.5
D ₂₅	(µm)	5	3	3	2
Chromium ^{vi} (at end of stated shelf life)	(ppm)	<2	<2	<2	<2

For further information

Technical helpline

Tel: 0845 812 6232

E-mail: info@uk.lafarge.com

Customer services

Tel: 0845 812 6300

E-mail: customerservice@uk.lafarge.com

Sales

Niki Heath:

Tel: 01949 869204

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