

PRODUCT DATA SHEET

EQIOM Spinor® A12 Microcement

Ultra-fine microcement for soil and rock grouting, structural rehabilitation and high-performance applications

PRODUCT DESCRIPTION

EQIOM Spinor® A12 Microcement is an ultra-fine hydraulic binder based on blast furnace slag designed for injection applications. Its maximum particle size of 12 µm and highly controlled particle size distribution provides consistent and reliable performance.

WHERE TO USE

EQIOM Spinor® A12 Microcement can be used in the following applications, but is not limited to:

- Consolidation and sealing of underground works, foundations and cut-off walls
- Injection of soils, rock fissures, annular voids, and under-slab cavities
- Creation of waterproof barriers, and groundwater control systems
- Rehabilitation and strengthening of deteriorated masonry, concrete and mortar structures
- Consolidation and regeneration of wells, mines and weakened ground

CHARACTERISTICS / ADVANTAGES

EQIOM Spinor® A12 Microcement provides the following characteristics and benefits:

- Ultra-fine hydraulic binder based on blast furnace slag, providing a durable and sustainable solution
- Controlled particle size distribution for consistent performance and reliable results
- Outstanding injectability and penetrability due to its very low viscosity and yield value
- Excellent grout stability and long-term durability, with no loss of strength over time
- High resistance to aggressive environments, including sulphates, chlorides, acids, and leaching
- Improves soil watertightness and provides effective water sealing in fractured ground
- Capable of penetrating finer voids and microcracks than conventional Portland cement grouts
- Effective for the stabilization and consolidation of soils, sands, gravels, and other unstable ground conditions
- Suitable for the rehabilitation and strengthening of deteriorated mortar, concrete, and masonry structures
- Cost-effective and environmentally friendly alternative to silicate gels and certain injection resins
- Compatible with a wide range of admixtures, including set accelerators such as SikaSet® NC, to meet specific application and project requirements
- Highly versatile and adaptable to a broad range of grouting applications and mix designs

PRODUCT INFORMATION

Composition / Manufacturing	Ultra-fine hydraulic binder based on blast furnace slag
Packaging	25 kg bag
Shelf Life	12 months from date of production

Storage Conditions	Store in a cool, dry location, protected from moisture and adverse weather conditions, in the original sealed and unopened bag	
Density	<u>Specific gravity</u>	<u>2,940 kg/m³</u>
Granulometry	<u>D100 (100% passing)</u>	<u>12 µm</u>
Bulk Density	700 kg/m ³	
Surface	<u>Blaine Fineness</u>	<u>> 10,000 cm²/g</u>

TECHNICAL INFORMATION

Specific Advice

EQIOM Spinor® A12 Microcement requires the use of a dispersing agent, such as Sikament®-300N, to ensure proper particle deflocculation and optimum performance. The data presented in this Technical Data Sheet were obtained using 350 mL of Sikament®-300N per 100 kg of EQIOM Spinor® A12 Microcement, corresponding to the minimum recommended dosage for this admixture.

To accelerate setting and strength development, a set accelerator such as SikaSet® NC may be used. The data presented in this Technical Data Sheet were obtained using a dosage of 2,940 mL of SikaSet® NC per 100 kg of EQIOM Spinor® A12 Microcement, corresponding to the maximum recommended dosage for this admixture.

Actual dosage requirements may vary depending on the application and site conditions, and should be verified through appropriate testing prior to use.

The following table presents the properties achieved with EQIOM Spinor® A12 Microcement based on three typical mix designs with water-to-cement ratios of 0.8, 1.0, and 1.2, incorporating Sikament®-300N. Results obtained with the addition of SikaSet®NC are also presented, where applicable.

SYSTEMS

System Structure	W/C	0.8	1.0	1.2	
Density					
Fresh Grout Density	1.58 kg/L	1.50 kg/L	1.45 kg/L		(ASTM C138)
Viscosity					
Flow Time	45 s	33 s	30 s		(ASTM D6910)
Note: Marsh cone with a 4.76 mm inside outlet diameter					
Bleeding					
3 hours	0.5 %	1.5 %	2.5 %		(ASTM C940)

W/C	0.8	1.0	1.2
-----	-----	-----	-----

Gelation

Gel Time	3 h 30	4 h 00	5 h 00
----------	--------	--------	--------

With use of set accelerator SikaSet® NC:

Gel Time	2 h 45	3 h 00	4 h 30
----------	--------	--------	--------

Note: Loss of grout horizontality upon tilting a transparent cylinder

Compressive Strength

7 days	22 MPa	17 MPa	14 MPa	(ASTM C109)
28 days	30 MPa	20 MPa	15 MPa	

With use of set accelerator SikaSet® NC:

7 days	26 MPa	18 MPa	16 MPa
28 days	32 MPa	23 MPa	21 MPa

BASIS OF PRODUCT DATA

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

ENVIRONMENT, HEALTH & SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

EQUIPMENT

EQIOM Spinor® A12 Microcement can be used with the same on-site equipment as conventional cementitious grouts, including:

- Grouting pump or press
- High energy mixer (1500 rpm), turbo mixer, or high speed colloidal mixer
- Low agitation tank (approx. 60 rpm) to keep grout at low viscosity and prevent sedimentation

MIXING

Admixtures, such as the Sikament®-300N superplasticizer, are typically added to the mixing water prior to the introduction of EQIOM Spinor® A12 Microcement. When required, the SikaSet® NC set accelerator is added after an initial mixing period of at least five (5) minutes to ensure complete particle dispersion.

The grout should be mixed using high-energy mixing and maintained under low agitation throughout the injection operations. A minimum mixing time of five (5) minutes is recommended. Batch sizes should not exceed 80 % of the total mixing container capacity to ensure optimal grout homogenization.

Note:

- Handling of EQIOM Spinor® A12 Microcement requires the same precautions as ordinary Portland cement.
- For bulk applications, use clean, dry, and watertight silos.
- Turbo mixers are recommended. High-speed grout recirculation by a centrifugal pump ensures optimal particle dispersion and excellent grout homogeneity.
- Colloidal mixers may cause an increase in grout temperature due to the energy generated during particle dispersion. This temperature rise can accelerate grout setting. Adequate temperature control is therefore recommended.

CLEANING

Clean all tools and equipment with water immediately after use. Hardened material can only be mechanically removed.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

LEGAL NOTES

The information, and in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products

when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request or may be downloaded from our website at: www.sika.ca

Sika Canada Inc.

Head Office
601, avenue Delmar
Pointe-Claire, Quebec
H9R 4A9
1-800-933-SIKA
www.sika.ca

Other locations

Boisbriand (Quebec)
Brantford; Cambridge;
Sudbury; Toronto (Ontario)
Edmonton (Alberta)
Surrey (British Columbia)

Product Data Sheet

EQIOM Spinor® A12 Microcement
October 2026, Version 01.03
020201010060000132

EQIOMSpinorA12Microcement-en-CA-(10-2026)-1-3.pdf

