

ECA Microcement 8000 SR

SULPHATE RESISTANT MICRO-CEMENT TO BE INJECTED INTO THE SOIL OR THE ROCK

DESCRIPTION

The ECA Microcement 8000 SR is a sulphate-resistant Micro-cement specifically designed for injection into soil or rock. When used in conjunction with a suitable superplasticizer, it effectively penetrates cracks and voids, providing reinforcement, structural enhancement, and water flow control in the soil and rock formations.

The ECA Microcement 8000 SR is formulated with precise calibration to ensure sulphate resistance, featuring a low tricalcium aluminate (C₃A) content and an alkaline nature.

USES

The ECA Microcement 8000 SR has multiple applications:

- It is used for injection in stone structures like mines, tunnels, and caverns to halt groundwater flow and stabilize the soil
- Suitable for injection into dam foundations to prevent water seepage and provide soil stabilization
- Utilized for filling and stabilizing gravelly soils
- Its versatility makes it a reliable solution for water control and soil reinforcement in various construction projects

ADVANTAGES

- Guaranteed durability.
- Economical solution.
- Safe working environment.
- Excellent crack penetration.
- Compatible with standard equipment.

APPLICATION

In general, high-pressure pumps are typically used for pumping the cement slurry into the soil.

However, when it comes to injections into rock and soil at lower pressures, mono-pumps can be employed.

TYPICAL PROPERTIES

Degree of fineness	+ 800 m ² /kg
Particle Size	
- 40 microns	100%
- 30 microns	99%
- 20 microns	99%
- 15 microns	98%
- 10 microns	92%
- 5 microns	58%
- 2 microns	20%
Alkali (Na ₂ O Eq)	0.3 - 0.6 %
Performance by volume	1.48 - 1,50 kg/l
Cone March	32 - 34 s
Penetrant	2% maximum
Water/cement ratio	1.0
The ECA Microcement 8000 works like a regular fine cement with an initial intake	+ 4 hours

MIXING

For effective preparation of ECA Microcement 8000 SR, it's recommended to mix it with a super plasticizer and water reducer, typically at 1.0% to 3.0% by weight of cement, maintaining a water-to-cement ratio between 0.5 and 1.0.

Begin by filling the water mixer, then add ECA Microcement 8000 SR and mix for 2 minutes. Add the super plasticizer, followed by more ECA Microcement 8000 SR, and mix for an additional minute.

Pour the mixture into a suitable mixer with a rapid paddle, stirring continuously until ready for injection.

Note that the usage time of ECA Microcement 8000 SR exceeds 90 minutes, providing flexibility in its application.

CURING

ECA Microcement 8000 SR exhibits a setting time similar to that of normal Portland cement and other microcements.

PACKAGING

ECA Microcement 8000 SR is supplied in 1000 kg bags.

STORAGE

ECA Microcement 8000 SR should be stored and maintained in its original packaging in a well-ventilated and dry environment.

The shelf life of ECA Microcement 8000 SR is 12 months from the date of production.

HEALTH AND SAFETY

For more information, please check the Material Safety Data Sheet.

CONTACT

Al-Faiha for Engineering Products is the exclusive licensee manufacturer for ECA.

For more information, please contact us at techsupport@alfaihaengineering.com.

DISCLAIMER

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