

MasterRoc MP 580 S

Microfine cement for injection into rock and soil.

Material description

MasterRoc MP 580 S is a microfine injection cement for rock and soil. Due to its small particle size and to a tailor made system of admixtures MasterRoc MP 580 S penetrates very well into tight joints, fissures and pore spaces to provide a consolidated and water-tight grouted rock or soil mass, at final setting time. MasterRoc MP 580 S is a well graded cement with high penetrating capacity.

Fields of application

- Rock injection: pre and post-injection in tunnels, caves, mines, etc. Long term sealing of the groundwater and soil consolidation.
- Ground injection: soil consolidation and long term sealing of the groundwater.

Features and benefits

- Excellent penetration into tight joints, fissures and pore spaces
- Water-tight solution due to increased penetration
- Standard cement injection equipment can be used
- Better working environment and no hazardous components
- Durable
- Economical solution

Packaging

MasterRoc MP 580 S is supplied in 1000 kg bags.

Storage

MasterRoc MP 580 S has a shelf life of 6 months when stored in original closed bags, in ventilated dry are.

Essential characteristics		
Fineness (Blaine)		> 800 m ² /kg
Particle size distribution:	<40 micron	100 %
	<25 micron	98 %
	<20 micron	95 %
	<15 micron	90 %
	<10 micron	72 %
	< 5 micron	42 %
	< 2 micron	18%
The setting times, at a 1:1 w/c ratio (by weight) and at 20° C are as follows:	Initial set: 7-8 h (Measured by Vicat needle)	
	Final set: 14-15 h (Measured by Vicat needle)	
Flow cone		35 - 41 s
Bleeding maximum		2 %
Mud balance		1,45 – 1,50 kg/l
Compressive strength after:		2 days 1,8 - 2,2 MPa
		7 days 3,8 - 4,3 MPa
		28 days 5,7 - 6,7 Mpa

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Application sheet

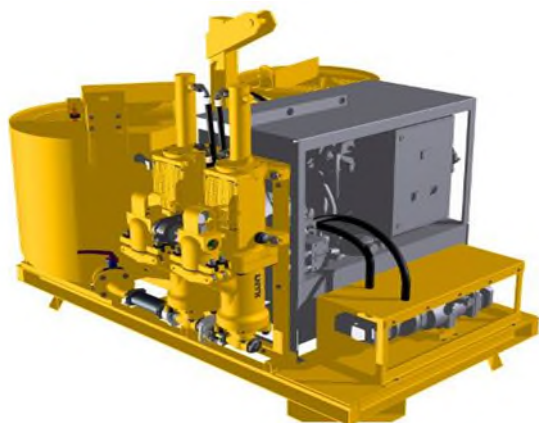
Application procedure

After mixing the microcement with water, the grout injection is carried out with conventional standard cement injection equipment.

The w/c ratio should normally be between 0.7 and 1.2 and it is also possible to use a water reducing admixture as MasterRheobuild and MasterGlenium Sky, which reduces the w/c ratio with the same fluidity, in order to increase the final strength.

Mixing

- Fill the mixer with water
- Add cement and mix for 2 minutes
- Add the superplasticizer, if used, and mix for another minute
- Transfer to the agitator
- It is very important to use an efficient mixer. The best solution is colloidal mixers, but high speed paddles are also acceptable:
 - Minimum rpm for paddle mixers: 400
 - Minimum rpm for colloidal mixers: 1500



Pot life

The mix should be kept under constant agitation prior to injection. Do not keep grout in agitator longer than 60 minutes.

Safety instruction

For information on the correct and safe use, transport, storage and disposal of the product, consult the most recent Safety Data Sheet.

Other services

For additional technical information, brochures, references, technical reports and technical support please visit www.master-builders-solutions.com/it-it or alternatively contact infomac@masterbuilders.com.

Scan QR code to visit the product page and download the latest version of this technical data sheet and any additional documentation.



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Disclaimer

Since 16/12/1992, Master Builders Solutions Italia Spa has been operating under a Certified Quality System compliant with the UNI EN ISO 9001 Standard. Furthermore, the Environmental Management System is certified according to the UNI EN ISO 14001 Standard and the Safety Management System is certified according to the UNI ISO 45001 Standard.

For further information, please consult the local Technician of Master Builders Solutions. The technical advice on how to use our products, either written or verbally given, are based on the current state of our scientific and practical expertise, and does not imply the assumption of any guarantee and/or responsibility for the final results of works executed using our products.

Therefore, the customer is not exempted from the exclusive task and responsibility of verifying the suitability of our products for the intended use and purposes.

This version supersedes all the previous ones.

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