

Microfine Portland Cement for Injection

DESCRIPTION

TamCrete MFC SR is a microfine sulphate resistant cement for rock and soil injection. Its fine particle size, together with the addition of TamCem Superplasticisers, provides superior penetration into tight joints, fissures and pore spaces, thus provide a water-tight grouted rock or soil mass.

TamCrete MFC SR is ground from blast furnace slag cement to achieve a specific surface area of approximately 6460 cm²/g.

KEY BENEFITS

- > Sulphate resistant
- > Standard cement injection equipment can be used
- > Superior penetration into rock fissures and pore spaces
- > Higher strengths achievable than with chemical grouts
- > Greater penetration imparts greater water tightness
- > Better working environment and no hazardous components
- > Durable
- > Economical solution

TYPICAL APPLICATIONS

- > Rockmass grouting for tunnels, caverns, mines, etc., used for pre and post excavation injection. Ground water sealing and ground stabilisation
- > Soil Injection: Ground stabilisation, ground water sealing
- > Concrete crack injection
- > Consolidation of weak and fractured rock
- > Sealing of water channel

TECHNICAL DATA

TamCrete MFC SR	
Specific Surface Area	6460 cm ² /g
Particle Size	
d95 [µm]	24.6

TamCrete MFC SR	
Water demand (%)	32.2
Initial Set	207 min
Le Chatelier Test (mm)	0.7
Compressive Strength (MPa)	28.1 @ 2 days 74.9 @ 28 days
Loss on ignition (%)	1.5
Insol. Residue (%)	0.9
SO ₃ (%)	1.83
Na ₂ O-equivilent (%)	0.64

Data according to EN196.

APPLICATION GUIDELINES

Mixing

Water/Cement ratio (by weight) shall normally be between 0.8 - 1.2.

- > Fill the mixer with water and superplasticizer.
- > Add Cement. Mix for 2 - 3 minutes.
- > Transfer to agitator tank ready for injection.

For efficient mixing and dispersion of our TamCrete MFC SR, a high-speed colloidal mixer is recommended. Minimum stirring rate shall be 1500 rpm.

Note: Mixing time should be kept to a maximum of 4 minutes.

Pot Life

The mix shall be kept under constant agitation prior to injection. Do not keep grout in agitator for longer than 40 minutes.

Injection

High-pressure piston pumps are normally used to pump the suspension into the rock. The grout should be injected within 30 - 40 minutes after mixing to ensure that it keeps penetrating into the fissures. Longer open times can be achieved with TamCem HCA hydration control admixture.

TamCrete MFC SR

Microfine Portland Cement for Injection

normet

CONSTRUCTION CHEMICALS

TECHNICAL DATA SHEET

PACKAGING

TamCrete MFC SR is supplied in 25 kg bags or 1000kg bulker bags. Packaging size may vary subject to local regulations and requirements.

STORAGE

TamCrete MFC SR should be stored at room temperature above 5°C, kept dry and out of direct sunlight. If these conditions are maintained and the product packaging is unopened, then a shelf life of six months can be expected.

HEALTH & SAFETY

TamCrete MFC SR should only be used as directed. We always recommend that the Safety data sheet (SDS) is carefully read prior to application of the material. Our recommendations for protective equipment should be strictly adhered to for your personal protection. The Safety data sheet is available upon request from your local Normet representative.

Whilst any information and/or specification contained herein is to the best of our knowledge, true and accurate, we always recommend that a trial be carried out to confirm suitability of the product. Please note regional climatic conditions may cause a variation in the performance of the product. No warranty is given or implied in connection with any recommendations or suggestions made by us or our representatives, agents or distributors. The information in this data sheet is effective from the date shown and supersedes all previous data. Please check with your local Normet office to confirm that this is current issue.