

MasterRoc[®] SLF 75

Soil conditioning foam for Tunnel Boring Machines (TBM)

Material Description

MasterRoc SLF 75 is a high-performance foaming agent, specially designed to improve the performance and control of the soil through the screw conveyor under the toughest conditions.

Areas of Application

MasterRoc SLF 75 creates a highly stable fine foam to hold the face pressure and maintain the rheology of the excavated ground longer than conventional foaming agents.

MasterRoc SLF 75 can be used with the standard foam generators installed on EPB machines. It can be injected at the cutterhead, into the working chamber and screw conveyor. Designed for silt to sand soils.

Characteristics and Benefits

- Improved soil behavior.
- Easier 'mucking'.
- Reduced soil permeability.
- Creation of plastic deformation properties in the soil, which provides controlled support pressure and increased face stability.
- Lower inner friction and lower abrasiveness of the soil at the cutterhead.
- Reduced stickiness of certain soils, which would lead otherwise to blockage problems.

Packaging

MasterRoc SLF 75 is available in IBCs and bulk.

Technical Data

Form	Liquid
Color	Transparent
Density [g/cm ³] 20°C	1.006
pH (3% solution) 20°C	7.4

Application Procedure

MasterRoc SLF 75 is used as aqueous solution with a typical 1%-3% concentration. Injected by a foam generator, the typical foam expansion ratio (FER) varies between 8 and 20, and the foam injection ratio (FIR) between 30 and 80. If the consistency of the muck needs to be reduced, MasterRoc SWA and SLP polymers can be used in combination with MasterRoc SLF 75. For the first use and combination with other soil conditioning agents, please contact your local Master Builders Solutions representative.

Dosing System

MasterRoc SLF 75 can be used with the standard TBM dosing and foaming equipment.

Storage

Must be stored between 5°C and 40°C. At temperatures below 10°C the product can become slightly turbid, but this doesn't affect the performance. If stored in original tightly closed containers, it will have a shelf life of 12 months. Do not allow the product to freeze. Please contact your local Master Builders Solutions representative prior to the use of any product that has become frozen.

Precautions

MasterRoc SLF 75 should preferably NOT be used during hyperbaric TBM interventions. It is advisable to monitor VOC in the working chamber during these interventions or wear a half mask with a filter A (brown). Please contact your local representative.

Standard precautions for handling chemical products should be observed: Avoid eye and skin contact and wear rubber gloves and safety glasses. For further information, refer to the Material Safety Data Sheet.



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Disclaimer

The information given here is true, represents our best knowledge and is based not only on laboratory work but also on field experience. However, because of numerous factors affecting results, we offer this information without guarantee and no patent liability is assumed. For additional information or questions, please contact your local representative.

Headquarters:

Master Builders Solutions Deutschland GmbH
Glücksteinallee 43-45
68163 Mannheim
Germany

ugc@masterbuilders.com

For more information, visit us: <https://ugc.master-builders-solutions.com/en/>

