

MasterRoc TSG 800

Fire Resistant Tail Shield Sealant for Shielded Tunnel Boring Machines (TBM).

Product description

MasterRoc TSG 800 is our new fire-resistant tail sealant used for the protection of the wire brushes, to efficiently seal the gap between the TBM Tail Shield and the concrete segments to prevent the ingress of water, grout and soil in the machine. It is specifically formulated to resist water and grout pressures; it will not break down under high mechanical pressure. It has excellent pumping properties and has excellent adhesion to all types of surfaces.

MasterRoc TSG 800 exhibits:

- Anti washout properties
- Excellent adhesion to all metal and concrete surfaces
- Easy pumpability
- Technical soundness and cost saving

Fields of application

Tunneling with shielded mechanized tunnel boring machines (TBMs) equipped with a tail seal brush system.

- Reduced consumption due to lower density
- Excellent pumping properties and cohesion
- Compatible with gaskets, metals and concrete
- Improved in packaging to allow easier recycling
- Lower pump pressure in TBM

Features and benefits

- Fire-resistant, no propagation of flames when exposed to sparks or direct flames.
- Excellent consistency and sealing properties.
- Proper adhesion to any metal or concrete surfaces.
- Very high washout resistance.
- It distributes correctly in the chambers between the rows of brushes for a good seal.
- Non-miscible with annulus grout.

Dosage

Typical consumption rate ranges between 0.7 and 1.2 kg/m² of segment outer surface area; however, this is a range of values subject to numerous factors. Consumption rates depends on several factors such as segment ring surface conditions, degree of curvature of tunnel drives, tail seal brush conditions, grouting pressures, and slurry pressures.

Packaging and Storage

MasterRoc TSG 800 is available in standard 260 kg steel Drums. MasterRoc TSG 800 should be stored at 5 - 35°C. Stored in original tightly closed drums it has a shelf life of up to 12 months.

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Form	Homogeneous paste
Color	Light beige
Odor	Slight odor
Density at 20°C (kg/m ³)	1350 ± 10
Matsumara sealing test (bar)	34.3
LH-Value at 10mm ASTM D 972 (N)	1.85
Oil dropping point ISO 2176 (°C)	> 170
Spray off test, ASTM D4049	< 7%

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Application sheet

Application method

MasterRoc TSG 800 must be applied to the shield tail brushes using the standard pumps supplied with EPB cutters. Attention must be paid to the state of conservation of the tail brushes which, in the case of their high consumption, can lead to poor application of the sealing grease.

Safety information

MasterRoc TSG 800 is an inert grease and is not hazardous. Standard precautions for handling chemical products should be observed. Avoid eye and skin contact and wear rubber gloves and safety glasses.

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

Warnings

MasterRoc products are for professional use. For further information, consult the Master Builders Solutions Italia Spa area technician.

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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