

MasterRoc[®] TSG 6

Tail sealant for shielded Tunnel Boring Machines (TBM)

Product description

MasterRoc TSG 6 is a tail sealant for shielded tunnel boring machines. It effectively seals the gap between the shield and concrete segments to prevent the ingress of water, grout and soil. It is formulated to resist high water and ground pressures, and has excellent pumping properties and adhesion to all types of surfaces.

Fields of application

Tunnelling with shielded TBMs equipped with a brush seal system.

Features and benefits

- Excellent sealing properties
- Excellent adhesion to any metal or concrete surfaces
- Excellent pumping properties

Packaging

MasterRoc TSG 6 is available in standard 70 kg or 250 kg steel drums for press plate pumps.

Technical data

Form	Homogenous paste
Colour	Beige
Odor	Slight odour
Density [kg/m³] 20°C	1500 ± 10
Consistency	230±20
ASTM D 217 [1/10 mm]	
Viscosity (20°C, approx.)	
@ shear rate 0,1/s	580 Pa*s
@ shear rate 100/s	115 Pa*s

Matsumara sealing test	34.3 bar
Volatility	< 2%
ASTM D 972	
Oil dropping point	> 170°C
ISO 2176	
Thermal decomposition	> 180°C
Sulfated Ashes	> 50%
Insoluble matter	> 50%
Water spray off	< 5%
ASTM D 4049	

Consumption

The typical consumption rate varies between 0.8 and 1.5 kg/m² of segment outer surface area, but can fall outside this range. Consumption depends on numerous factors such as segment surface conditions, curve drives, brush conditions, grouting pressures etc.

Storage

MasterRoc TSG 6 should be stored at 5 - 35°C. If stored in original tightly closed drums it has a shelf life of 12 months.

Safety precautions

MasterRoc TSG 6 is an inert material and is not hazardous. It is ecologically and environmentally friendly and poses no threat to worker safety or the environment. However, it is recommended that all normal precautions be taken when handling the product, such as the use of eye protection and gloves.

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.

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