

# MasterRoc<sup>®</sup> TSG 800

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

### Description

MasterRoc TSG 800 is a fire-resistant tail sealant used for wire brushes to effectively seal the gap between the shield tail and the concrete segments to prevent the ingress of water, annulus grout and soil. MasterRoc TSG 800 sealant is formulated to resist water and ground pressures, and has excellent pumping properties.

### Applications

Tunneling with shielded TBM equipped with a tail seal brush system

### Features

- Fire resistant
- Excellent sealing properties
- Excellent pumping properties
- Excellent adhesion to metal or concrete surfaces
- Non-miscible with annulus grout

### Benefits

- Does not propagate flames when exposed to sparks or flames
- Prevents the ingress of soil, water or grout into shielded TBM

### Performance Characteristics

#### Technical Data

Form	Homogeneous Paste
Color	Light Beige
Odor	Slight Odor
Density at 68 °F (20 °C)	84.3 lb/ft <sup>3</sup> (1.35 g/cm <sup>3</sup> )
Matsumara sealing test	497.5 psi (34.3 bar) – Passed
Consistency (ASTM D217), in. (1/10 mm)	0.85 (215)
Load Hysteresis Value (N @ 10mm penetration)	2.5
Sliding on metal surface (Dropping time), min	> 45
Soluble in water	No

### Guidelines for Use

**Dosage and Application Procedure:** The typical consumption rate of MasterRoc TSG 800 sealant is between 1.3 and 2.2 lb/yd<sup>2</sup> (0.7 and 1.2 kg/m<sup>2</sup>) of segment outer surface area. However, actual consumption rate depends on numerous factors, including segment ring surface conditions, degree of curvature of tunnel drives, tail seal brush conditions, grouting pressures, and slurry pressures. Please consult your local Master Builders Solutions representative to determine the actual consumption rate.

MasterRoc TSG 800 sealant is designed for use in conditions where the temperature typically remains above 50 °F (10 °C).



## Storage and Handling

**Storage Temperature and Shelf Life:** MasterRoc TSG 800 sealant should be stored in unopened, original containers, preferably at 40 °F to 95 °F (5 °C to 35 °C). If stored in the original and tightly closed containers, MasterRoc TSG 800 sealant will have a shelf life of 12 months. Do not allow the product to freeze. Consult your local sales representative before using any product that has become frozen.

**Safety:** MasterRoc TSG 800 sealant is an inert material and is not hazardous. MasterRoc TSG 800 sealant has passed a risk assessment indicating that its leachates are biodegradable, keeping pace with environmental regulations.

However, it is recommended that all standard precautions for handling chemical products should be observed. Avoid eye and skin contacts, and wear gloves and safety goggles. If contact occurs, rinse with plenty of water. In case of eye contact, seek medical advice. For further information, refer to the MasterRoc TSG 800 sealant Safety Data Sheet.

MasterRoc TSG 800 sealant has passed a risk assessment indicating that the leachable components of the sealant are biodegradable.

## Packaging

MasterRoc TSG 800 sealant is packaged in 572 lb (260 kg) and 143 lb (65 kg) steel drums.

## Related Documents

Safety Data Sheets: MasterRoc TSG 800 sealant.

## Additional Information

For additional information on MasterRoc TSG 800 sealant contact your local sales representative.

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## Limited Warranty Notice

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