

# MasterRoc<sup>®</sup> TSG 800

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

### Description

MasterRoc TSG 800 is a fire-resistant tail shield sealant that effectively seals the gap between the tail shield and the concrete segments to prevent the ingress of water, soil, or grout. It resists water and ground pressures and will not break down under high mechanical pressures. MasterRoc TSG 800 sealant has excellent pumping properties and will adhere to most metal or concrete surfaces.

### 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
- High washout resistance
- Fully compatible with gaskets, metals, and concrete
- 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

### Product Properties

Form	Homogenous paste
Color	Light beige
Odor	Slight odor
Density @ 72.5 °F (22.5 °C)	85.5 lb/ft <sup>3</sup> (1.37 g/cm <sup>3</sup> )
Consistency (ASTM D 217)	0.85 inch (215 [1/10 mm])
Matsumara sealing test	493 psi (34 bar) - Pass
Load Hysteresis Value (@ 10mm penetration)	2.5 N
Sliding on metal surface (Dropping time)	> 15 minutes
Water spray off (ASTM D4049) (% mass loss)	<7%
Soluble on water	No

## Guidelines for Use

**Consumption:** 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:** MasterRoc TSG 800 sealant should be stored in unopened, original containers, preferably at 40 °F to 86 °F (5 °C to 30 °C).

**Shelf Life:** If stored in the original and tightly closed containers, MasterRoc TSG 800 sealant will have a minimum 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, please contact your local sales representative.

*Master Builders Solutions creates technologies for the construction industry inspiring people to build better. We are active in ~40 countries and operate*

*35 production sites with over 1,600 employees. We develop, produce, and market high-quality chemical admixtures, as well as adjacent core technologies, to master the challenges of today and support a decarbonized future. Our people are pivotal and pair leading technologies and a strong brand heritage to surpass our customers' expectations and drive continuous value creation.*

## Limited Warranty Notice

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