

# Tail Sealant Grease for Shielded Tunnel Boring Machines

## Product description

RSF-60 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 or soil. It is formulated to resist high water and ground pressures, and has excellent pumping properties and adhesion to all surfaces. RSF-60 is designed for use in conditions where the ambient temperature will usually remain above 5°C.

## Field of application

Tunneling with shielded TBM equipped with a brush seal system.

## Consumption

Consumption will depend on numerous factors, such as segment surface condition, curve drives, brush conditions, and grouting pressures etc. The usual consumption rate can vary between 1.0 - 3.5 kg/m<sup>2</sup> of segment outer surface area. But may well fall outside this range.

## Features and benefits

- Excellent sealing properties
- Excellent adhesion to any metal or concrete surface
- Excellent pumping properties
- Heavy duty greases with high performance
- Good adhesion and avoiding blockage of dividers

- Anti-corrosion and protective of metal parts
- Good pumping specification and compatible with high pressure without damage packing's
- Good water wash-out and water spray off properties
- Optimizing the length and density of the fibers, and grease filler
- Optimizing the fiber density and grease adhesion property to increase resistance
- Optimizing filler value to increase consistency

## Packaging

RSF-60 is packaged in standard 250 kg steel drums.

## Storage

RSF-60 should be stored in unopened, original containers, preferably at 15-35°C. Shelf life is expected to be 12 months.

## Safety precautions

RSF-60 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. An independent environmental risk assessment report is available on request.

Form:	Homogenous paste, fibrous
Color:	Yellow
Odor:	None
Density [kg/m <sup>3</sup> ] 20°C:	1500 ± 100
Consistency: ISO 2137 [1/10mm]	3-4 NLGI Grade
Oil dropping point: ASTM D566	300 °C
Water wash out (79 °C 1 hrs):	<6%
Water spray off: ASTM D4049 [%]	<4%
PENETRATION DEGREE (25°C)	Unworked: 233
	Worked: 220
Flash point (base oil):	>250 °C
Fire point	350 °C