

MasterRoc ABR 5

Liquid anti-abrasion agent for hard rock & EPB Tunnel Boring Machines (TBM)

Material Description

MasterRoc ABR 5 is specifically designed to reduce abrasion and dust for tunnel boring machines operating in hard rock mode.

Areas of Application

It is used to reduce abrasive wear to the cutting tools, and to substantially reduce dust formation during excavation as well as cutterhead clogging.

Characteristics and Benefits

- Reduction of abrasive wear for cutting tools.
- Effective reduction of dust formation, leading to considerably improved working environment for TBM personnel.
- Better cooling of the cutterhead, improving the rubber seal durability, and extending the life of the cutter bearing.
- Reduce TBM down time due to less frequent cutter changes, therefore more time available for excavation.
- Improved transfer of the muck from the cutter head, resulting in reduced risk of blockage, cleaner cutter discs and cutterhead area, which make maintenance easier and reduce cutter disc changing time.
- Overall cost saving due to higher monthly advance rate and lower maintenance cost

Properties

Form	Liquid
Colour	Yellow to brown, transparent
Density kg/litre; 20°C	1.02 – 1.04
pH; 20°C	7.5 – 8.5
Viscosity; mPa.s; 20°C	Max. 500

Application

MasterRoc ABR 5 must first be turned into foam before it can be used. For this purpose, foam generating equipment typically used in Earth Pressure Balance (EPB) machines is recommended. The proposed foam expansion ratio (FER) is 8-15. The generated foam is then injected through foam or water injection ports at the cutterhead. The foam injection rate (FIR) is typically 30%.

Consumption

The typical consumption rate of MasterRoc ABR 5 is 0.5 – 1.5 kg/m³ of undisturbed rock.

Packaging

MasterRoc ABR 5 is available in 1000 litre palletcons.

Storage & Shelf Life

MasterRoc ABR 5 should be stored between 5°C and 40°C. If stored in original tightly closed containers. MasterRoc ABR 5 has a shelf life of 12 months. Do not allow the product to freeze. Please contact your local representative prior to the use of any product that has frozen.

Precautions

For the full health and safety hazard information and how to safely handle and use this product, make sure that you obtain a copy of the Safety Data Sheet (SDS) from our office or website.

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Disclaimer

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STATEMENT OF RESPONSIBILITY

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