

PANTAROCK 140

Item No 0654

Liquid polymer for soil improvement in TBM applications

FIELDS OF APPLICATION

PANTAROCK 140 is a highly effective polymer specially designed to improve the performance of TBM excavation in challenging ground conditions, e.g. in soils with high clay content and high fine content.

Furthermore it can be applied to alter the characteristics of bentonite slurries for slurry TMB applications.

PANTAROCK 140 has exceptional lubricating properties. It reduces the adhesion to the excavation tools during the excavation of soils exhibiting a sticky behaviour.

The highly efficient product is suitable for the following applications:

- Slurry TBMs
- EPB
- High clay content ground
- Modification of bentonite slurries

DOSAGE

PANTAROCK 140, used pure or in solution at concentration between 1-4% with the injected water.

Due to the different compositions of soils, the necessary dosage quantity varies and needs to be determined in field trials.

For further assistance, please contact the Ha-Be Tunnel Team.

WORKING PRINCIPLE

PANTAROCK 140 is a high-quality liquid polymer providing the following effects:

In TBM applications

PANTAROCK 140 generates a plastic soil which can be easily excavated and transported.

In bentonite slurries

PANTAROCK 140 provides sufficient and entire wetting of bentonite particles even at low energy intakes. The admixture has slight retarding effects which prolongs the workability time and facilitates the pump ability.

TECHNICAL DATA

Homogeneity	homogenous
Colour	amber
State	liquid
Density	1.31 ± 0.02 g/cm ³
pH-value	7.5 ± 1.0
Workability	from +1 °C
Shelf life	approx. 1 year from date of production if stored properly
Storage conditions	Store in unopened, original sealed packaging between +5 °C and +25 °C. Protect from frost and insolation.



Ha-Be Tunnel Team

PROCESSING INDICATIONS

In TBM applications

PANTAROCK 140 is used either pure in a water solution during the excavation of tunnels. It can be injected to the tunnel face, into the excavation chamber or in the screw conveyor.

In bentonite suspensions

PANTAROCK 140 should be added to the ready-mixed suspension.

The mixing time in mixers with a high mixing intensity should be at least 30 seconds.

This product is not classified as hazardous according to the CLP regulations. See safety data sheet for further information.

PACKAGING

- 30 l can
- 200 l barrel
- 1000 l container

REMARKS

This information describes the application- and processing possibilities of a product and its operation principles under regular conditions. Having no influence on the further application and processing, especially in conjunction with other construction materials, the given indication are neither a warranty in respect of the product's properties or its fitness for a particular purpose nor a full instruction of use. This information, any other recommendation or verbal advice are not binding and do not infer to any liability or legal demand.

Due to continuous further development, the most recent Technical Data Sheet is valid and will be supplied on request. All orders are accepted subject to our current general terms and conditions.

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SUITABILITY- AND PRE-TESTS ARE NECESSARY BEFORE APPLYING THE CONCRETE ADMIXTURE!