

# MasterRoc ACP I43

Anti-clay polymer for earth pressure Tunnel Boring Machine

## Material Description

MasterRoc ACP I43 is a liquid polymer, specially designed for highly cohesive and adhesive soils such as marl, silts, and clays that contain fine particles.

## Areas of Application

MasterRoc ACP I43 anticlay polymer creates a stable foam and can be used with the standard foam generators installed on Earth Pressure Balance (EPB) machines.

MasterRoc ACP I43 anti-clay polymer is designed to reduce the clogging and adhesion potential of clayey soils.

MasterRoc ACP I43 anti-clay polymer can be injected at the cutterhead, into the working chamber, or onto the screw conveyor.

## Characteristics and Benefits

- Reduces clogging and adhesion on the cutterhead
- Creates a plastic soil material that can be easily excavated and transported
- Helps to avoid the re-agglomeration of clay particles
- Reduces cutterhead torque
- Increases TBM speed

## Properties

Form	Liquid
Colour	Brown
Density (20°C)	1.042 ± 0.02 g/cm <sup>3</sup>
pH (20°C)	6-8 (3% solution)
Viscosity (20°C)	<160 mPa.s

## Application

MasterRoc ACP I43 anti-clay polymer is used as an aqueous solution with 2% to 4% concentration typically. Injected via a foam generator, the typical foam expansion ratio (FER) varies from 8 to 20, and the typical foam injection ratio (FIR) from 30 to 80. If the consistency of the muck needs to be reduced,

MasterRoc SWA and MasterRoc SLP polymers can be used in combination with MasterRoc ACP I43 anti-clay polymer. For the first use and combination with other soil conditioning agents, please contact your local Master Builders Solutions sales representative.

## Dosing System

MasterRoc ACP I43 anti-clay polymer can be used with the standard TBM dosing and foaming equipment.

Do not mix MasterRoc ACP I43 anti-clay polymer with any other soil conditioning additives as this may cause immediate gel formation. If several soil conditioning products are used on the TBM, it is recommended to reserve a specific transfer or dosing pump for MasterRoc ACP I43 anti-clay polymer.

If the transfer or dosing pump is being used for more than one product, the pump should be thoroughly cleaned with water before switching to MasterRoc ACP I43 anti-clay polymer.

## Packaging

MasterRoc ACP I43 is available in 200 litre drums and 1000 litre IBC's.

## Storage & Shelf Life

MasterRoc ACP I43 should be stored between 5°C and 40°C. If stored in original tightly closed containers. MasterRoc ACP I43 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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