

# MasterRoc MP 368 TIX

# Highly reactive, thixotropic and fire resistant two component polyurea silica injection resin for ground consolidation in highly fractured strata

### **MATERIAL DESCRIPTION**

**MasterRoc MP 368 TIX** is a fast reacting, thixotropic twocomponent, solvent-free polyurea silicate injection resin, specifically designed for rapid ground consolidation in strata with lots of open cracks at the surface.

## FIELD OF APPLICATION

- Consolidation of fractured rock in underground structures.
- Consolidation of coal in development roadways and longwalls.
- Sealing against gas and water.
- Stabilization of face headings.
- Sealing of cracks in the roof.

#### FEATURES AND BENEFITS

- Good adhesion to concrete and rock strata of 5,0 MPa after 0,5 h.
- Mixes easily even in low temperatures > 5°C.
- Compressive strength of > 30 Mpa.
- Immediate thixotropic behavior after mixing.
- High structural strength combined with flexibility.
- Injected material shows good adhesion to damp and low friction substrates.
- Neither expands its volume with water nor absorbs water.

#### PACKAGING

MasterRoc MP 368 TIX is supplied as:

Part A: 36 kg cans and 298 kg drums Part B: 28 kg cans and 232 kg drums

## **TECHNICAL DATA**

	Color	Viscosity MPa's	Density Kg/dm³
Part A	Colorless	450	1.46
Part B	Dark brown	115	1.16

Tested at 23°C

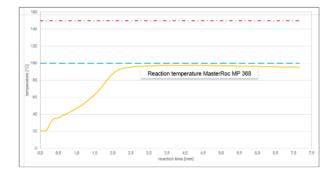
Mixing ratio: 1 to 1 by volume

## **REACTION CHARACTERISTICS**

Testing temperature	23°C
Flow time	90s ± 30s
Setting time	2min30s ± 30s
Foam expansion factor	1
Compressive strength	30 MPa
Bond strength 0.5 h	5.0 MPa
Border time	< 5min

Border time: time needed to reach 1 MPa adhesion strength under lab conditions

## **REACTION TEMPERATURE**



#### **APPLICATION PROCEDURE**

Part A and B are delivered ready for use. They are injected in the ration of 1:1 by volume, using a two component injection pump equipped with a static inline mixer nozzle, as shown in the following picture.





# MasterRoc MP 368 TIX

# Highly reactive, thixotropic and fire resistant two component polyurea silica injection resin for ground consolidation in highly fractured strata

Please note: The curing time is dependent on the temperature of the product and ground. Please store both components prior to application at a temperature of at least +5°C.

To achieve a favourable mixing result during injection the addition of a static in-line mixer in connection with the mixing head is strongly recommended. The length of the static mixer should be approximately 32 cm.

## EQUIPMENT

For short breaks in the injection procedure pump part A through the nozzle including the static in-line mixer. After the injection process pump an appropriate cleaning and maintenance agent (MasterRoc MP 230 CLN) or oil containing no water, through the pump and injection hoses until MasterRoc MP 368 TIX is completely washed out. Store the pump and hoses with the cleaning agent inside and seal all openings.

## STORAGE

**MasterRoc MP 368 TIX** has a shelf life of 24 months if stored in original, unopened packaging between +5 °C to +35°C. The storage area must be kept dry.

## SAFETY PRECAUTIONS

The use of gloves, eye protection and safety clothes are recommended. Any physical contact (e.g. skin or eyes) with the product should be avoided. If contact with skin occurs, wash thoroughly using soap and water. In case of eye contact, rinse thoroughly with an eyebath filled with water and seek medical advice. The products are harmless. Uncured products should not enter the local drainage system. Spillage must be collected using absorbent materials such as sawdust and/or sand and disposed of in accordance with local regulations. For further information, please refer to the Material Safety Data Sheet or contact your local Master Builders Solutions representative.

## NOTE

Technical support, where provided, does not constitute supervisory responsibility. For additional information contact your local MB Construction Chemicals Solutions South Africa (Pty) Ltd representative. MB Construction Chemicals Solutions South Africa (Pty) Ltd shall not be liable for technical advice provided.

MB Construction Chemicals Solutions South Africa (Pty) Ltd reserves the right to have the true cause of any difficulty determined by accepted test methods. Undertaking such tests is not, and shall not be deemed to be, an admission of liability or an assumption of any risk, loss, damage or liability.

## QUALITY AND RESPONSIBLE CARE

All products originating from MB Construction Chemicals Solutions South Africa (Pty) Ltd are manufactured under a management system independently certified to conform to the requirements of the quality standards ISO 9001, environmental and occupational health and safety standards.

\* Properties listed are based on laboratory controlled tests

### DISCLAIMER

The technical information and application advice given in this MB Construction Chemicals Solutions South Africa (Pty) Ltd publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.