

# MasterRoc<sup>®</sup> MP 368

Highly reactive, fire resistant two component polyurea silicate injection resin for ground consolidation

## Material Description

MasterRoc MP 368 is a fast reacting two component, solvent-free polyurea silicate injection resin specifically designed for rapid ground consolidation.

## Areas of Application

- Consolidation of fractured rock in underground structures
- Consolidation of coal in development roadways and longwalls
- Sealing against gas and water
- Repair of concrete cracks

## Characteristics and Benefits

- Good adhesion to concrete of 5,0 MPa after 0,5 h
- Mixes easily even in low temperatures > 5°C
- Compressive strength of >25 MPa
- Penetrates cracks wider than  $\geq 0.14$  mm
- 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 is supplied as:  
Part A: 36 kg cans and 298 kg drums  
Part B: 28 kg cans and 232 kg drums

## Technical Data

(at 23° C)	Color	Viscosity mPa.s	Density kg/dm <sup>3</sup>
Part A	Colorless	300	1.49
Part B	Dark brown	115	1.16

Mixing ratio Part A to B: 1 to 1 by volume

## Reaction Characteristics

Testing temp.	23°C
Flow time	90s $\pm$ 30s
Setting time	2min30s $\pm$ 30s
Foam expansion factor	1

Compressive strength 24 h	>25 MPa
Bond strength 0,5 h	5.0 MPa
Border time	< 5 min
Penetration capacity	$\geq 0.14$ mm

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

## Application Procedure

Part A and B are delivered ready to use. They are injected in the proportion of 1:1 by volume using a two-component injection pump equipped with a static in-line mixer nozzle, as shown below:



example of a two-component injection pump

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 favorable 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.

## Cleaning of Injection 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 is completely washed out. Store the pump and hoses with the cleaning agent inside and seal all openings.

# MasterRoc<sup>®</sup> MP 368

Highly reactive, fire resistant two component polyurea silicate injection resin for ground consolidation

## Storage

MasterRoc MP 368 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.

## 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.

## Disclaimer

The information given here is true, represents our best knowledge and is based not only on laboratory work but also on field experience. However, because of numerous factors affecting results, we offer this information without guarantee and no patent liability is assumed. For additional information or questions, please contact your local representative.

## Contact Details

Master Builders Solutions UK Ltd

Swinton Hall Road,

Swinton,

Manchester,

M27 4EU

Tel: +44 (0) 161 727 6300

[www.master-builders-solutions.com/en-gb](http://www.master-builders-solutions.com/en-gb)

