

# MasterRoc<sup>®</sup> MP 364 Flex

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

## DESCRIPTION

**MasterRoc MP 364 Flex** is a two component, solvent-free polyurea silicate injection resin specifically designed for rapid ground consolidation.

## TYPICAL APPLICATIONS

- Consolidation of fractured rock in underground structures
- Consolidation of coal in development roadways and longwalls
- Repair of concrete cracks
- Also suitable for underwater application

## ADVANTAGES

- Compressive strength of 34 MPa
- Adhesion to concrete of 3.6 MPa
- Penetrates cracks wider than 0.14 mm
- Neither expands its volume with water nor absorbs water
- Injected material shows good adhesion to wet and low friction substrates
- Equally fast reaction in dry or underwater conditions
- High structural strength combined with flexibility
- Fire resistant (according to DIN4102-B2)

## PACKAGING

Part A: 36 kg cans and 298 kg drums  
Part B: 28.5 kg cans and 236 kg drums

## TYPICAL PROPERTIES\*

	Color	Viscosity mPa.s	Density kg/dm <sup>3</sup>
Part A	Colorless	425	1.47
Part B	Dark brown	180	1.18

*Tested at 23°C*

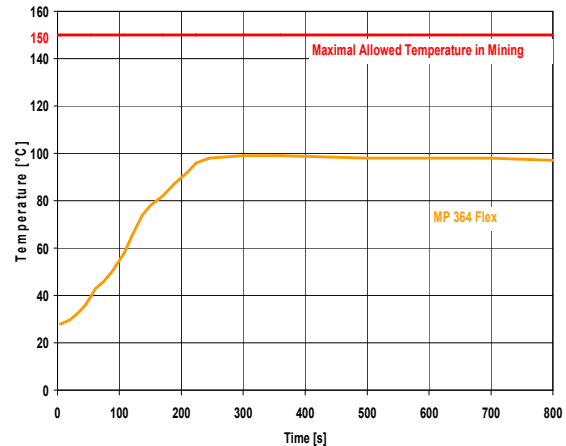
Mixing ratio Part A to B: 1 to 1 by volume

## REACTION CHARACTERISTICS

Testing temp.	23°C
Flow time	90s ± 30s
Setting time	2min30s ± 30s
Foam expansion factor	1
Compressive strength	34 MPa
Adhesion to concrete	3.6 MPa
Border time	< 5 min

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

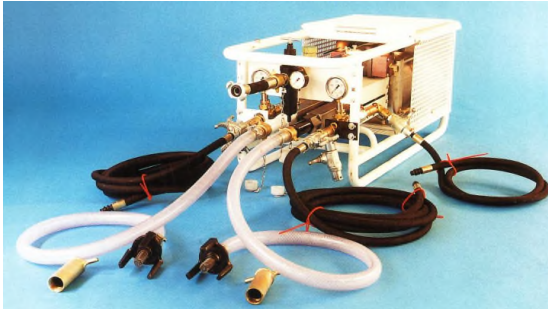
## REACTION TEMPERATURE



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## APPLICATION GUIDELINES

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 in the following picture.



Please note: The curing reaction time is significantly dependent on the temperature of the product and the ground. Please store both components prior to application at a minimum temperature of 15°C.

To achieve an optimal mixing of the components during injection, the inclusion 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 in-line static mixer nozzle. After finishing the injection, pump an appropriate agent or oil which does not contain water through the pump and injection lines.

## STORAGE AND SHELF LIFE

If stored in dry conditions, in unopened, tightly closed original containers and within a temperature range of +5°C and +35°C, the components of **MasterRoc MP 364 Flex** have a shelf life of 12 months.

## HEALTH AND SAFETY

Refer to the Material Safety Data Sheet for safety measures:

### MasterRoc MP 364 Flex Part A MasterRoc MP 364 Flex Part B

Avoid contact with skin and eyes by using the required personal protective equipment, such as overalls, gloves and safety glasses. If contact with skin occurs, wash thoroughly using soap and water. If contact with eyes occurs, rinse thoroughly with an eyebath filled with water and seek medical advice. The products are harmless.

Uncured products should be prevented from entering local drainage systems and water courses. Spillage must be collected using absorbent materials such as sawdust and sand and disposed of in accordance with local regulations.

\* Properties listed are based on laboratory controlled tests.

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### STATEMENT OF RESPONSIBILITY

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