

3	03 64 00	Injection Grouting
31	31 01 70	Maintenance of Tunneling and Mining
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MasterRoc[®] MP 368

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

Description

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

Applications

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

Features

- Good adhesion to concrete - Develops bond strength of 725 psi (5 MPa) in 30 minutes after application
- Mixes easily even at low temperatures (as low as 40 °F [5°C])
- Compressive strength of over 3600 psi (25 MPa) in 24 hours
- High structural strength combined with flexibility
- Injected material has good adhesion to damp and low friction substrates
- Does not absorb water

Benefits

- Increases productivity and shortens injection down-times
- Reduces rock falls typically resulting from unstable ground conditions

Performance Characteristics

Technical Data

Physical properties*:

	Color	Viscosity (mPa.s)	Density, lb/ft ³ (g/cm ³)
Part A	Colorless	300	93.0 (1.49)
Part B	Dark Brown	115	72.4 (1.16)

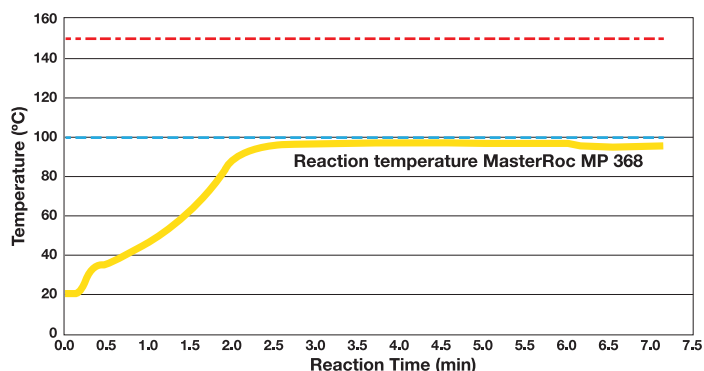
*@ 73 °F (23 °C)

Reaction characteristics:
 Mixing Ratio: 1:1 by volume

Testing Temperature	73 °F (23 °C)
Setting Time	2 min 30 s ± 30 s
Foam Expansion Factor	1
Compressive Strength	3600 psi (25 MPa)
Bond Strength (0.5 h)	725 psi (5 MPa)
Border Time	< 5 min

Note: Border time is the time needed to reach 145 psi (1 MPa) bond strength under lab conditions

Reaction Temperature:



Guidelines for Use

Dosage and Application Procedure: MasterRoc MP368 Part A and Part B are delivered ready for use. They should be injected in the ratio 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.



Example of a two-component injection pump.

The curing time is dependent on the temperature of the product and of the ground. Store both MasterRoc MP 368 Part A and Part B at ambient temperatures above 40 °F (5 °C) prior to application.

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 12 in. (300 mm).

Equipment: During short breaks in the injection process, pump MasterRoc 368 Part A through the nozzle including the static in-line mixer.

After the injection process, pump an appropriate cleaning and maintenance agent (such as MasterRoc MP 230 CLN product) or engine oil that does not contain any water through the pump and injection hoses until MasterRoc MP 368 product is completely flushed out. Store the pump and hoses with the cleaning agent inside and seal all the openings.

Storage and Handling

Storage Temperature and Shelf Life: When stored in dry conditions in unopened and tightly closed original containers and within a temperature range of 40 °F and 95 °F (5 °C and 35 °C), the components of MasterRoc MP 368 product have a shelf life of 24 months.

Safety: 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 water and seek immediate medical advice.

Uncured products should not be allowed to enter local drainage systems. Spillage must be collected using absorbent materials such as sawdust or sand, and be disposed of in accordance with local regulations.

For further information on MasterRoc MP 368 products, please refer to the Safety Data Sheet or contact your local Master Builders Solutions representative.

Packaging

MasterRoc MP 368 Product is available in the following packages:

MasterRoc MP 368 Part A: 6 gal (24 L) pails and 53 gal (200 L) drums

MasterRoc MP 368 Part B: 6 gal (24 L) pails and 53 gal (200 L) drums

Related Documents

Safety Data Sheets: MasterRoc MP 368 Part A product, MasterRoc MP 368 Part B product

Additional Information

For additional information on MasterRoc MP 368 product, contact your local sales representative.

Master Builders Solutions creates technologies for the construction industry inspiring people to build better. We are active in ~40 countries and operate 35 production sites with over 1,600 employees. We develop, produce, and market high-quality chemical admixtures, as well as adjacent core technologies, to master the challenges of today and support a decarbonized future. Our people are pivotal and pair leading technologies and a strong brand heritage to surpass our customers' expectations and drive continuous value creation.

Limited Warranty Notice

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