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 4,350 psi (30 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*:

<table>
<thead>
<tr>
<th></th>
<th>Color</th>
<th>Viscosity (mPa.s)</th>
<th>Density, lb/ft³ (g/cm³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part A</td>
<td>Colorless</td>
<td>300</td>
<td>93.0 (1.49)</td>
</tr>
<tr>
<td>Part B</td>
<td>Dark Brown</td>
<td>115</td>
<td>72.4 (1.16)</td>
</tr>
</tbody>
</table>

* @ 73 °F (23 ºC)

Reaction characteristics:
Mixing Ratio: 1:1 by volume

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<table>
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<tbody>
<tr>
<td>Testing Temperature</td>
<td>73 °F (23 ºC)</td>
</tr>
<tr>
<td>Setting Time</td>
<td>2 min 30 s ± 30 s</td>
</tr>
<tr>
<td>Foam Expansion Factor</td>
<td>1</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>4,350 psi (30 MPa)</td>
</tr>
<tr>
<td>Bond Strength (0.5 h)</td>
<td>725 psi (5 MPa)</td>
</tr>
<tr>
<td>Border Time</td>
<td>&lt; 5 min</td>
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</table>

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

Dosage and Application Procedure: MasterRoc MP 368 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.

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 BASF 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.

The Admixture Systems business of BASF’s Construction Chemicals division is the leading provider of solutions that improve placement, pumping, finishing, appearance and performance characteristics of specialty concrete used in the ready-mixed, precast, manufactured concrete products, underground construction and paving markets. For over 100 years we have offered reliable products and innovative technologies, and through the Master Builders Solutions brand, we are connected globally with experts from many fields to provide sustainable solutions for the construction industry.
Limited Warranty Notice

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