MasterRoc® RBA 380
Highly reactive, thixotropic polyurea silicate anchoring resin for rock bolting

Description
MasterRoc RBA 380 is a fast reacting, two-component, instantly-thickening, solvent-free polyurea silicate anchoring resin specifically designed for rock bolting. Its thixotropic feature facilitates overhead applications without additional sealing.

Applications
- Resin-into-bolt rock bolting at all angles
- Bolt-into-resin rock bolting at all angles
- For the use with steel and glass fiber bolts

Features
- Thixotropic
- Fast curing and rapid strength development
- Long distance pumping capability
- Easy mixing even at low temperatures (> 40 °F (5 °C))
- High structural strength
- Excellent adhesion to damp and low friction substrates
- Does not absorb water or expand when comes in contact with water

Benefits
- Secure and precise injection
- Flexibility in applications
- Reliable rock bolting

Physical 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>490</td>
<td>86.8 (1.39)</td>
</tr>
<tr>
<td>Part B</td>
<td>Dark Brown</td>
<td>150</td>
<td>73.7 (1.18)</td>
</tr>
</tbody>
</table>

Note: Tested at 73 °F (23 °C)

Mixing Ratio: 1:1 by volume

Reaction characteristics:

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<table>
<thead>
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</thead>
<tbody>
<tr>
<td>Testing Temperature</td>
<td>73 °F (23 °C)</td>
</tr>
<tr>
<td>Thixotropic Time</td>
<td>Immediately</td>
</tr>
<tr>
<td>Setting Time</td>
<td>3 min ± 20 s</td>
</tr>
<tr>
<td>Foam Expansion Factor</td>
<td>1</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>&gt; 5000 psi (35 MPa)</td>
</tr>
<tr>
<td>Pull-out Strength</td>
<td>≥ 56 kips (24 in.) (250 kN (600 mm))</td>
</tr>
</tbody>
</table>
MasterRoc RBA 380

Guidelines for Use

**Dosage and Application Procedure:** The Part A and Part B of MasterRoc RBA 380 resin are delivered ready to 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.](image)

The curing time is dependent on the temperature of the product and of the ground. Store both components at a temperature 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 conjunction with the mixing head is strongly recommended. The length of the static mixer should be approximately 12 in. (300 mm).

**Equipment:** For short breaks in the injection process, pump MasterRoc RBA 380 resin 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 oil that does not contain any water, through the pump and injection hoses until MasterRoc RBA 380 resin is completely flushed out. Store the pump and hoses with the cleaning agent inside and seal all openings.

Storage and Handling

**Storage Temperature and Shelf Life:** If stored in dry conditions, in unopened and tightly closed original containers, and within a temperature range of 40 °F to 95 °F (5 °C to 35 °C), the components of MasterRoc RBA 380 resin have a shelf life of 12 months.

**Caution:** Part A of MasterRoc RBA 380 resin freezes below a temperature of 32 °F (0 °C) and cannot be reconstituted.

**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, refer to the Safety Data Sheet or contact your local BASF representative.

Packaging

MasterRoc RBA 380 product is available in the following packages:

- MasterRoc RBA 380 Part A: 7 gal (25 L) jerricans and 55 gal (209 L) drums
- MasterRoc RBA 380 Part B: 6 gal (24 L) jerrycans and 53 gal (200 L) drums

Related Documents

Safety Data Sheet: MasterRoc RBA 380 Resin
Additional Information

For additional information on MasterRoc RBA 380 resin, 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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