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MasterRoc[®] MP 368 TIX

Highly reactive, thixotropic, and fire-resistant two-component polyurea silicate injection resin for ground consolidation in highly fractured strata and for concrete crack repair

Description

MasterRoc MP 368 TIX product is a thixotropic two-component polyurea silicate injection resin that is fast reacting, solvent-free, and is specifically designed for rapid ground consolidation in strata with open cracks at the surface. It is also suitable for concrete crack repair. The thixotropic behavior of MasterRoc MP 368 TIX product prevents uncured resin from flowing out of the fissures.

Applications

- Consolidation of fractured rock in underground structures
- Stabilization of face headings
- Sealing against gas and water
- Sealing of cracks in walls and roofs
- Concrete crack repair

Features

- Good adhesion to concrete and rock strata
- Mixes easily even in low temperatures (as low as 40 °F [5 °C])
- Compressive strength of over 3600 psi (25 MPa) in 24 hours
- Thixotropic behavior immediately after mixing
- High structural strength combined with flexibility
- Injected material has good adhesion to damp and low friction substrates
- Does not absorb water and hence, does not expand in the presence of water

Benefits

- Secure, precise, and flexible injection applications
- Reduces rock falls typically resulting from unstable ground conditions
- Uncured resins remain in the fissures

Performance Characteristics

Technical Data

Physical properties*:

	Color	Viscosity (mPa.s)	Density, lb/ft ³ (g/cm ³)
Part A	Colorless	490	87.4 (1.40)
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)
Flow Time	140 ± 30 s
Setting Time	3 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) adhesion strength under lab conditions

Guidelines for Use

Dosage and Application Procedure: MasterRoc MP 368 TIX 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 TIX Part A and Part B products 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 MP 368 TIX Part A product 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 TIX 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: If 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 TIX 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 TIX product, please refer to the Safety Data Sheet or contact your local Master Builders Solutions representative.

Packaging

MasterRoc MP 368 TIX product is available in the following packages:

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

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

Related Documents

Safety Data Sheets: MasterRoc MP 368 TIX Part A product and MasterRoc MP 368 TIX Part B product

Additional Information

For additional information on MasterRoc MP 368 TIX 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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