MasterRoc® MP 358 GS

Highly reactive, two component hydrophobic polyurethane injection resin for strata consolidation

Material Description

MasterRoc MP 358 GS is a two component, solvent-free polyurethane injection resin specifically designed for rapid stabilization of strata where very high compressive and bonding strength is needed.

Areas of Application

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

Characteristics and Benefits

- Fast reacting material applied where structural strength and flexibility is required
- Reacts and expands in volume up to 1.5 times without water contact
- Penetrates cracks wider than 0.14 mm
- Excellent compressive and bonding strength
- Low sensitivity to water
- Almost no increase in reaction temperature in contact with water
- Good bonding on wet and damp surfaces

Packaging

Part A: 25 kg cans and 205 kg drums
Part B: 30 kg cans and 250 kg drums

Technical Data

(at 23° C)	**Color**	**Viscosity mPa.s**	**Density kg/l**
Part A	Yellow	300	1.01
Part B	Dark brown	240	1.22

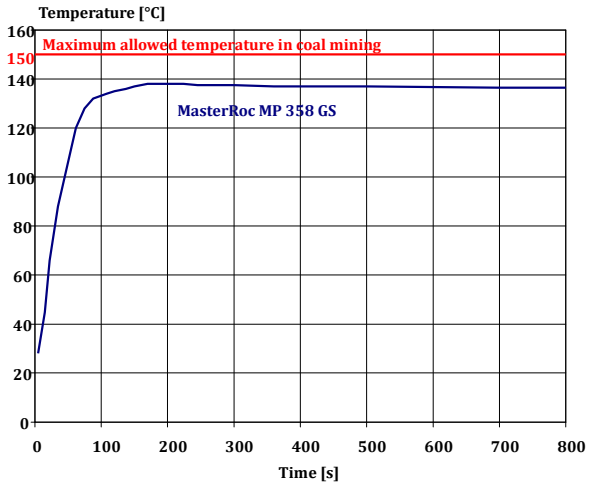
Flash point: A & B separately: > 200°C
Mixing ratio Part A to B: 1 to 1 by volume

Reaction Characteristics

Testing temp.	25°C
Gel time	65s ± 10s
Hardening time	70s ± 10s
Foam expansion factor	≤ 1,5
Flexural adhesive strength (7d)	> 9 N/mm²
Border time	<10 min

Border time: Time needed to reach 1 MPa adhesive strength in lab conditions

Reaction Temperature



Application Procedure

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 below:

example of a two-component injection pump

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Please note: The curing reaction time is dependent on the temperature of the product and the ground. Please store both parts prior to application at a minimum temperature of 15°C.
To achieve the best mixing of the components during injection, the inclusion of a static in-line mixer in connection with the mixing head is strongly advised. 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 the injection process pump an appropriate cleaning and maintenance agent (MasterRoc MP 230 CLN) or oil containing no water, through the pump and injection hoses until MasterRoc MP 358 GS is completely washed out. Store the pump and hoses with the cleaning agent inside and seal all openings.

Storage

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 358 GS have a shelf life of 24 months.

Precautions

Refer to the Safety Data Sheet for safety measures:
MasterRoc MP 358 GS – Part A
MasterRoc MP 358 – 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 cured product is harmless and inert.
Uncured liquid materials 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.

Disclaimer

The information given here is true, represents our best knowledge and is based not only on laboratory work but also on field experience. However, because of numerous factors affecting results, we offer this information without guarantee and no patent liability is assumed. For additional information or questions, please contact your local representative.

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