

Fire Resistant, Rapid Setting Injection System



REZOLUTION MINING POLYMERS

Bolt Hold Fire Resistant, Rapid Setting Injection System

DESCRIPTION

ReZolution Bolt Hold is a fire resistant, instant gelling, rapid setting injection system based on urea silicate technology. It is designed to structurally grout ground anchors into rock strata.

FEATURES

- Fire resistant.
- Instantly forms a grease-like consistency when injected to prevent drainage.
- Economical - product volume can be adjusted to suit hole diameter requirements.
- Easy to apply.
- Very slight expansion on setting adds superior anchor lock strength.
- Will also seal against water inflow.
- Increases corrosion protection properties of ground anchor due to full encapsulation.

ReZolution Bolt Hold is a two component system, with both components mixed in equal volume proportions (1:1 by volume) using a two-component injection pump coupled with a static in-line mixer head.

PRODUCT DATA

	Bolt Hold Part A	Bolt Hold Part B
Appearance	Opaque liquid	Brown liquid
Viscosity (20°C)	400 cps	200 cps
Density (20°C)	1.45 g/ml	1.24 g/ml
Flash point	Not applicable	> 200°C

TECHNICAL DATA

Working time (25°C)	Approximately 2.0 minutes from mixing
Exothermic Cure	Starts after 3 minutes
Maximum bond to substrate	Attained within 2 hours
Pull out force v time	140 kN after 4 hours (a 25mm diameter bolt, set into a 35mm diameter x 300mm depth hole.
1 hour compressive strength	> 25MPa
24 hour compressive strength	> 30MPa
7 day compressive strength	Typically 38 MPa

Please note that the above figures are those measured in the Polymer Group Ltd laboratory. Conditions in the mine may influence these results.

ReZolution Bolt Hold

CLEANING INJECTION EQUIPMENT

For short breaks, pump only Part A through the mixer.

For long breaks (eg storage, or after job is complete) pump clean water through Part A pump/injection lines; and pump clean engine oil through Part B pump/injection lines.

SAFETY PRECAUTIONS

Please refer to the Material Safety Data Sheets for full details. Although ReZolution Bolt Hold contains isocyanates, the cured product is inert and harmless.

Nevertheless, only experienced operators should mix and install this product.

Wear appropriate PPE and avoid contact with skin and eyes.

Mop up any spills with absorbent materials such as zeolite or sand, and dispose of in accordance with local regulations. Prevent unreacted product from entering drains.

STORAGE

12 months if stored in dry, unopened containers within temperature range +5° to +35°C.

Beware of frost sensitivity for Part A.

REZOLUTION MINING POLYMERS

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Chemistry***

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ReZolution Mining Polymers, a division of Polymer Group Ltd was established in 2013 with the goal of developing a high-performance range of mining industry strata reinforcing and strata control materials.

The technical group associated with ReZolution Mining Polymers comprises research and development chemists, experienced mining industry personnel, together with construction industry applicators.

Polymer Group Ltd is seeking world-wide representation through regional distributors who are experienced in supply to construction (tunneling and related infrastructure activities), mining material suppliers and geothermal/ground control professionals and contractors.



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