

## RapidSet 150

*Rapid Setting Microfine Cement for Rock and Soil Injection*

### DESCRIPTION

**RapidSet 150** is a rapid setting microfine cement developed for rock and soil injection. Because of its fineness and rapid setting, **RapidSet 150** has an excellent penetration into joints, fissures and provides efficient tightness as well as improved productivity and cycle times. The unique combination of the special manufacturing process and selected materials enable **RapidSet 150** to meet the requirements of the market.

### APPLICATIONS

**RapidSet 150** is recommended for:

- **Caverns and mines:** pre- and post-excavation injection.
- **Tunneling:** sealing faces and walls, grouting tunnel structure.
- **Rock injection:** pre- or post-stabilization injection. Fixation and water scaling in fractured zone during tunnel construction.
- **Soil injection:** stabilization, water tightness, preventing settlement, etc.
- **Curtain grouting for dams and embankments.**
- **Pre-packed grouting.**

### FEATURES

- Rapid setting time.
- Standard cement injection technology and equipment can be used.
- Better performance in terms of tightness and penetration into micro cracks in rock and soil.
- Nontoxic; safer environment.
- Good long term durability.
- Compatible with most admixture types.

### GUIDELINES FOR USE

**RapidSet 150** should be used in conjunction with a water reducing admixture (1% by weight cement). Water/cement ratio should typically be 1:1 for optimum performance.

### TECHNICAL DATA

| Particle Size Distribution & Fineness  |       |
|--|-------|
| < 40 (µm)                              | 99%   |
| < 30 (µm)                              | 99%   |
| < 20 (µm)                              | 98%   |
| < 15 (µm)                              | 97%   |
| < 10 (µm)                              | 90%   |
| < 5 (µm)                               | 53%   |
| < 2 (µm)                               | 12%   |
| Fineness - Blaine (m <sup>2</sup> /kg) | > 700 |

| Physical Properties and Strength                    |             |
|---|-------------|
| Water to cement ratio                               | 1.0         |
| Marsh Funnel Flow (seconds)                         | < 35        |
| Bleeding rate for 2 hours (%)                       | < 2         |
| Mud Density (kg/ L)                                 | 1.45 – 1.50 |
| Initial Set (minutes)                               | 150         |
| Final Set (minutes)                                 | 180         |
| Compressive Strength at 28 day (N/mm <sup>2</sup> ) | > 15        |

Note: Technical data presented are typical values. Minor variations to be expected.

### POT LIFE

The pot life is between 30 - 40 minutes. The grout should be kept agitated prior to injection to ensure that it keeps penetrating into the fissures.

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### TECHNICAL SUPPORT

EnGro offers a comprehensive range of tailor made microfine cementitious products. In addition, EnGro offers technical support and on-site service to specifiers, end users and contractors.

### CONDITIONS OF USE

**RapidSet 150** based grout should always be mixed in a high efficiency mixer (preferably a colloidal mixer) for maximum 3 minutes. Keep under slow constant agitation prior to injection.

Open time may be increased with proprietary admixtures (use in accordance with admixture manufacturer's instructions).

**RapidSet 150** is manufactured from natural materials and slight differences in color maybe observed.

### PACKAGING

**RapidSet 150** is supplied in 25 kg bags.

### STORAGE

**RapidSet 150** has a shelf life of six months when stored in original sealed bags, kept dry and out of direct sunlight.

### HEALTH AND SAFETY

**RapidSet 150** is an irritant to skin and eye. If such contact occurs, the affected area should be washed with plenty of clean water. In case of eye contact, seek immediate medical advice. For detailed information and safety instructions, please refer to *Safety Data Sheet*.

### Typical Particle Size Distribution for RapidSet 150

