**SHOTCRETE ACCELERATOR**

**DESCRIPTION:**
SHOTCRETE ACCELERATOR is a non-caustic accelerator primarily used in shotcrete applications. It is supplied in a dry powder form.

**USES:**
SHOTCRETE ACCELERATOR has two main effects on shotcrete. It provides rapid setting or stiffening so the newly applied shotcrete can begin to support almost immediately. It also provides high early strength to allow loading at an early stage.

An accelerator is useful if concrete repair work is susceptible to damage at an early age.

In underground work, an accelerated shotcrete can protect the rock mass from dynamic loading effects from rock displacement or blasting stresses at an early age.

Shooting into very wet areas can at times be possible only with a rapid setting shotcrete material.

**ADVANTAGES:**
SHOTCRETE ACCELERATOR is a non-caustic, non-corrosive accelerator which gives shotcrete a quick set and high early strength gain with minimal effect on long term strength.

SHOTCRETE ACCELERATOR is less harmful than the Portland cement used in the shotcrete mix.

In underground work the high early strength gain achievable with SHOTCRETE ACCELERATOR can speed up substantially the drill, blast, shotcrete, muck and excavation cycle.

**APPLICATION:**
A dosage of 2% to 4% by weight of cement is recommended for normal applications. A higher dosage may be required to initially seal a wet area. The dosage should not exceed 5% by weight of cement.

SHOTCRETE ACCELERATOR can be pre-mixed with completely dry material or metered through an additive dispenser for dry or wet shotcrete applications.

**PACKAGING:**
SHOTCRETE ACCELERATOR is supplied in 25 kg (55 lb) pails.

Liability for damages or defective goods shall be limited to the refund of the purchase price or product replacement.
### TECHNICAL DATA:

<table>
<thead>
<tr>
<th>Material</th>
<th>Test Method</th>
<th>Type GU</th>
<th>Type GU plus Silica Fume</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Initial</td>
<td>Final</td>
</tr>
<tr>
<td>Type GU Cement</td>
<td>ASTM C-1102</td>
<td>3min</td>
<td>9min</td>
</tr>
<tr>
<td>Microsil Shotcrete:</td>
<td>ASTM C-403</td>
<td>195min</td>
<td>240min</td>
</tr>
<tr>
<td>unaccelerated</td>
<td>(Set)</td>
<td>15min</td>
<td>20min</td>
</tr>
<tr>
<td>3% Shotcrete Accelerator</td>
<td></td>
<td>8 hr Compressive Strength</td>
<td>7 MPa (1015 psi)</td>
</tr>
<tr>
<td>Microsil Shotcrete:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3% Shotcrete Accelerator</td>
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Cement composition varies from manufacturer to manufacturer, and thus accelerator/cement compatibility can vary as well. It is recommended that accelerators be tested with the cement to be used on a project prior to start-up to ensure performance specifications can be met.

### SAFETY PRECAUTIONS:

Although SHOTCRETE ACCELERATOR is non-caustic and less alkaline than cement, prolonged contact may irritate the skin. Normal safety wear such as rubber gloves, dust mask and safety glasses, used to handle conventional cement based products should be worn. Material Safety Data Sheets are available upon request.