**EUCON RETARDER 100**

**WATER REDUCING - EXTENDED SET CONTROLLING RETARDER**

**DESCRIPTION**

**EUCON RETARDER 100** is a synthetically produced liquid water-reducing and set retarding admixture for concrete. It is a modified sodium gluconate. EUCON RETARDER 100 may be used at varying dosage rates to achieve extended set times compared to a control mix of up to 30 hours. EUCON RETARDER 100 contains no added chlorides or chemicals known to promote the corrosion of steel and is compatible with air-entraining agents, water reducers and accelerators.

**PRIMARY APPLICATIONS**

- Prestressed concrete
- Concrete requiring water reduction and set time control
- Architectural concrete
- Hot weather concrete placement

**FEATURES/BENEFITS**

**Plastic Concrete**
- Retards setting characteristics
- Improves finishability
- Improves workability
- Reduces water requirements
- Reduces segregation

**Hardened Concrete**
- Increases strengths
- Improves finished appearance
- Reduces cracking
- Reduces permeability
- Non staining

**TECHNICAL INFORMATION**

**Performance Data**

The following test results were achieved using typical ASTM C 494 mix design requirements, 517 lb/yd³ (307 kg/m³) cement content and similar (± 0.5)% air content.

These results were obtained under laboratory conditions with materials and mix designs meeting the specifications of ASTM C 494. Changes in materials and mix designs can affect the dosage response of EUCON RETARDER 100.

**Eucon Retarder 100 Compressive Strength Data (psi)**

<table>
<thead>
<tr>
<th>Reference</th>
<th>3.0 oz/cwt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1940</td>
<td>3030</td>
</tr>
<tr>
<td>2960</td>
<td>4230</td>
</tr>
<tr>
<td>4400</td>
<td>5510</td>
</tr>
</tbody>
</table>

**Eucon Retarder 100 Set Time Results (hr:min)**

<table>
<thead>
<tr>
<th>Reference</th>
<th>3.0 oz/cwt</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:00</td>
<td>1:12</td>
</tr>
<tr>
<td>2:24</td>
<td>3:36</td>
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<tr>
<td>4:48</td>
<td>6:00</td>
</tr>
<tr>
<td>7:12</td>
<td>8:24</td>
</tr>
<tr>
<td>9:36</td>
<td>10:48</td>
</tr>
</tbody>
</table>

**Master Format #:**

03 30 00    03 40 00
03 70 00
PACKAGING

EUCON RETARDER 100 is packaged in bulk, 275 gal (1041 L) totes, 55 gal (208 L) drums or 5 gal (18.9 L) pails.

SHELF LIFE

1 year in original, unopened package.

SPECIFICATIONS/COMPLIANCES

EUCON RETARDER 100 meets or exceeds the requirements of:
- ASTM C 494, Type B & D
- AASHTO M 194
- CSA Standard CAN3 A266.2-M78

DIRECTIONS FOR USE

EUCON RETARDER 100 is normally used at dosages of 2 to 6 oz per 100 lb (130 to 390 ml per 100 kg) of cementitious material, depending on the application. Higher dosages are acceptable with prior testing and confirmation of the desired performance with specific materials being used.

EUCON RETARDER 100 should be added to the initial batch water of the concrete mixture. Do not dispense onto dry cement. Because of variations in job conditions and concrete materials, dosages other than the recommended amounts may be required. In such cases, contact your local Euclid sales representative.

PRECAUTIONS/LIMITATIONS

- Care should be taken to maintain EUCON RETARDER 100 above freezing; however, freezing and subsequent thawing will not harm the material if thoroughly agitated.
- Add to mix independent of other admixtures.
- In all cases, consult the Safety Data Sheet before use.