**Calcium Formate** is an additive in powderform which will allow the formulator to improve the accelerating and hardening effect on the strength development and adhesion properties of all cement based mortars.

**Applications**

Calcium Formate can be used in concrete, dry mortar and tile adhesives, it acts on both setting and hardening time by accelerating the formation of tricalcium aluminate silicate. Depending on dosage Calcium Formate also strongly modifies the initial workability of the wet mortar.

**Use**

Calcium Formate is used in all cement based systems that need the improvement of early or later strength, in particular in all mix designs containing setting time retarders. It is successfully used in the formulation of tile adhesives to improve the workability and to extend the film formation time. It also gives the same advantages in all mixtures containing cellulose ethers and redispersible resins.

**Benefits in Use**

- Improved strengths
- Improved adhesion strengths
- Low temperatures

**Properties**

<table>
<thead>
<tr>
<th>Nature</th>
<th>Powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Ivory White</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>1.15 kg/dm³</td>
</tr>
<tr>
<td>pH</td>
<td>6.0 - 7.5</td>
</tr>
<tr>
<td>Composition</td>
<td>(C₃H₆O₆Ca) 98%</td>
</tr>
<tr>
<td>Solubility</td>
<td>Partially soluble</td>
</tr>
</tbody>
</table>

**Addition Rates**

Dosage rates will be dependant on mix design, process, types of materials and the desired effect but typically:

500gms - 2000gms per 100 kg cement  
(0.50% - 2.00% by weight of cement)

It is advisable to carry out preliminary tests to establish the correct dosage for the application.

**Standards**

Calcium Formate is produced in accordance with the ISO 9001 Quality Management Standard and the ISO 14001 Environmental Management Standard.
**Compatibility**

Calcium Formate is compatible with all Portland cement systems, including GGBS, Pfa and limestone blends.

Calcium Formate is compatible with all O screte admixtures, but should be added to the mix separately.

**Storage**

Store the product in a cool dry and ventilated environment. Moisture ingress can cause the product to not work as effectively as the original product.

**Packaging**

Calcium Formate is supplied in 25kg bags.

---

**Handling**

Calcium Formate is not an irritant by contact with the skin, it can be easily removed from any surface with soap and water. Inhalation can cause an irritation of the first part of the respirator tract, this sensation disappears immediately when you stop handling it, it is therefore advisable to use a dust mask and avoid its dispersion in the environment. In case of accidental spillage it must be picked up in its dry state and discharged in an authorised waster dump.

Refer to the Material Safety Data Sheet for full details.

Please consult the OSCRETE Technical Department for advice on admixture selection.