**Description**

Osperse Accel-100 is a synergistic blend of inorganic salts specifically formulated to provide rapid set times and high early strengths in mixes containing blends of Portland and Alumina cements.

Osperse Accel-100 is a fine, free flowing powder to improve dispersion in dry bagged cementitious mortars.

**Action**

Osperse Accel-100 is a potent set time accelerator and early strength enhancer with performance being proportional to dosage rate.

The unique blend of inorganic salts in Osperse Accel-100 accelerate the hydration rate in both Portland and Alumina cements by advancing the hydration acceleration period.

Standard accelerators currently used in OPC/Alumina systems tend to only be effective in accelerating the hydration phase in the alumina cement, whereas Osperse Accel-100 has been designed to also react with both cements and this effect dramatically improves the hydration efficiency of the cementitious binder system.

**Applications**

Osperse Accel-100 is used as an accelerator for fast setting cement and mortars, mainly based on high alumina cement and Alumina-Portland cement blends. Major applications include use in Self-leveling floor screeds, Fast Set tile adhesives, rapid set repair compounds and shotcrete.

**Properties**

<table>
<thead>
<tr>
<th>Nature</th>
<th>Powder</th>
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<tbody>
<tr>
<td>Colour</td>
<td>Off White</td>
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<tr>
<td>Bulk Density</td>
<td>0.590 g/cm³</td>
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<tr>
<td>pH</td>
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**Addition Rates**

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

(0.1%-0.5% by weight of formulation)

**Benefits in Concrete**

- Provides rapid reduction in setting times
- High early age strengths
- Cost effective alternative to Lithium Carbonate
- Improved performance in low temperatures

**Standards**

Osperse Accel-100 is produced in accordance with the ISO 9001 Quality Management Standard and the ISO 14001 Environmental Management Standard.
Osperse ACCEL-100

Compatibility
Osperse ACCEL-100 is compatible with all cement types and hydraulic binders, included ground granulated blast furnace slag, pulverised fly ash, hydrated lime and gypsum.

Storage
Osperse ACCEL-100 is a pressure sensitive powder and should be stored in cool, dry conditions. Unopened bags, if stored correctly, have a minimum shelf life of 12 months.

Handling
Avoid contact with skin and eyes. Protective goggles and gloves should be worn at all times.

Packaging
Osperse ACCEL-100 is supplied in a 15kg sack with inner polyethylene liner.

Notes
Osperse Accel-100 should be added to the mixer after the addition of sand and cement to provide adequate dispersion in the finished product.

Addition Rates
The natural variations in cement, hydraulic binders and aggregates all affect the addition rate required to achieve the desired set times and early strengths. Trials should be carried out to determine the optimum dosage levels. As an initial guide, an addition level in the range of 0.1% - 0.5% by weight of formulation is recommended. This may have to be adjusted depending on the level of acceleration required for initial and final set, raw material and application.

High levels of Osperse ACCEL-100 will result rapid acceleration of setting times. The amount of acceleration will be dependent on the actual level, temperature, cement type and levels.

Please consult Oscrete Technical department for advice on additive selection.

Disclaimer
The physical properties quoted are typical, and should not be taken as a specification. The information supplied in our literature is based on data and experience and is given in good faith. Our policy is one of continuous research and development and we reserve the right to update this information at any time; customers should therefore ensure they have the latest issue. Whilst we guarantee the consistent high quality of our products, we have no control over the circumstances in which our materials are used, site conditions or the execution of the work and are therefore unable to accept any liability for any loss or damage which may arise as a result thereof. Materials are supplied in accordance with our standard conditions of sale.