Osperse RM is a specially formulated, polysaccharide based, powdered water retaining additive for use in masonry mortars. Osperse RM is a fine, free-flowing powder that has been specifically formulated to improve cohesiveness and water retention properties of dry silo mortars for use in bricklaying and rendering applications.

Osperse RM dramatically increases the water retention properties of silo mortar. Bricks and blocks used on site can be highly absorbent and can rapidly "suck" water out of the mortar, leading to issues with mortar losing workability. Osperse RM works by physically binding with the water, thereby preventing water being prematurely absorbed by the bricks and blocks. As the water is retained in the mortar, it allows the bricks and blocks to be adjusted over a much longer period and averts problems with pointing of the mortar, which can occur when mortar becomes too dry. Osperse RM should be thoroughly blended with sand and cement in a forced action mixer to ensure proper dispersion and accurately dosed via suitable calibrated equipment.

**Benefits**
- Improves cohesion of mortar
- Reduces bleed
- Improves water retention to allow >90% retentivity
- Allows greater air content stability

**Properties**

<table>
<thead>
<tr>
<th>Nature</th>
<th>Powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Off White</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>0.80 g/cm³</td>
</tr>
<tr>
<td>pH (1% solution)</td>
<td>Neutral</td>
</tr>
<tr>
<td>Particle Size</td>
<td>98% &lt;450um</td>
</tr>
</tbody>
</table>

**Addition Rates**

The natural variations in cements, hydraulic binders and aggregates all affect the addition level required to achieve the required water retention values and working time. Trials should be carried out to determine optimum dosage levels:

- 500gms - 1000gms per tonne of dry mortar

High levels of Osperse RM can result in the mortar becoming sticky and difficult to apply.

Osperse RM should be pre-blended with the sand/cement or lime prior to addition of water. Due to its particle size, Osperse RM will dissolve rapidly after addition of water to the dry mix.

**Standards**

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

Osperse RM is compatible with all Portland cement systems and hydraulic binders, including GGBS, Pfa and limestone blends.

Osperse RM is highly recommended for use with Unger's range of powdered air entraining agents.

**Storage**

Osperse RM is a moisture sensitive powder and should be stored in cool, dry conditions. Sealed containers, if correctly stored, have a minimum shelf of one year.

**Handling**

Osperse RM is classified as non hazardous. In line with normal handling procedures, personal protective equipment should always be worn.

Refer to the Material Safety Data Sheet for full details.

**Packaging**

Osperse RM is supplied in 600kg bulk bags.

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**Notes**

Osperse RM should be thoroughly blended with sand and cement in a forced action mixer to ensure proper dispersion and accurately dosed via suitable calibrated equipment.

**Addition Level**

The natural variations in cements, hydraulic binders, gypsum and aggregates will affect the addition level required for a given workability and specified percentage water retention levels. Trials should be carried out to determine the optimum dosage levels, as an initial guide, an addition level of 500g per 1000kg of dry mortar powder is recommended. Dosage rates can then be either increased or decreased to achieve the desired level of percentage water retention and consistence in the mortar. Higher levels of Osperse RM will result in increased 'stickiness' of the mortar on the tools and possible retardation of initial set.

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