Description
Sigma HS is a fine off white free flowing powder blend based on selected long chain fatty acid salts, a natural polymeric resin plasticiser and inert pore fillers. Sigma HS is also a particularly useful admixture for the control of efflorescence by reducing moisture movement within the concrete. Sigma HS has no significant effect upon setting times or the strength of concrete but does impart slight plasticising properties for improved workability with minimal air entrainment.

Applications
The high activity of Sigma HS makes it ideally suited for use in semi-dry and dry mixes in the production of cast and reconstructed stone, concrete masonry and paving where minimum water absorption is essential. Sigma HS is ideally suited for decorative products where good colour and good efflorescence control are of greatest importance.

Benefits in Concrete
- Reduced efflorescence
- Reduced water absorption
- Good dispersion
- Neutral colour

Properties
<table>
<thead>
<tr>
<th>Nature</th>
<th>Powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>White</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.600 g/cm³</td>
</tr>
<tr>
<td>pH</td>
<td>-</td>
</tr>
<tr>
<td>Chloride Content</td>
<td>&lt;0.10%</td>
</tr>
<tr>
<td>Na₂O equivalent</td>
<td>&lt;1.00%</td>
</tr>
</tbody>
</table>

Addition Rates
Dosage rates vary dependant on mix design, process, aggregate type and the desired effect but typically:

(1.00% - 3.00% by weight of cement)

Standards
Sigma HS complies with the requirements of BS EN 934-2 and is produced in accordance with the ISO 9001 Quality Management Standard and the ISO 14001 Environmental Management Standard.
Compatibility

Sigma HS is compatible with all Portland cement systems, including GGBS, Pfa and limestone blends. Sigma HS is compatible with all Oscrete admixtures, but should be added to the mix separately.

Storage

Sigma HS should be protected from extreme temperatures and if stored unopened within the range 5°C - 30°C will have an indefinite shelf life.

Handling

Sigma HS is a non hazardous product but in line with normal handling procedures, personal protective equipment should be worn.

Refer to the Material Safety Data Sheet for full details.

Packaging

20kg bags, 500 kg per pallet, shrink wrapped.

Notes

Sigma HS should be added neat, immediately after the water or at the end of the mixing process and not directly onto the cement. A mixing time of at least 30 seconds is recommended after the addition of the admixture.

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