Product data sheet
Microlite® P

Description
Microlite® P is a dry amorphous, spherical microsilica. It is pozzolanic and creates extra binder phases resulting in lower set-cement permeability. Microlite® P acts as an extender, lowering the cement slurry density and enhances the compressive strength.

Applications
The extremely fine particles of Microlite® P work as a packing agent (physically and chemically) between the cement particles and enhances the slurry and set cement properties, improving zonal isolation.

Microlite® P enhances fluid loss control, by reducing the permeability of the initial cement filter cake. It provides important properties as zero free water, low fluid loss, low viscosity, early strength development, high compressive strength, improved bonding, stable cement slurry and corrosion resistance to the cementing fluids. Microlite® P consists of spherical shaped particles of a minimum of 92 % of SiO₂. The particles are of submicron size, 0.20 μm. The production process of Microlite® P imposes larger chemical and particle size differences as compared to Microblock®.

Features
- Reduces operational cost by developing an early high compressive strength, without forming free water.
- Overall improvement of the quality and zonal isolation of set cement.
- Versatile product with equal effectiveness in fresh or seawater, for cost-effective logistics.
- Enhance sulphate resistant properties of the slurry and the compressive strength, improving the cement interphase.
- Provides thixotropic properties necessary for squeeze cementing, lost circulation, and gas migration control.
- Acts as a low temperature accelerator for saturated salt slurries.
- Imparts an early pozzolanic-type reaction that extends lightweight cement.

Chemical analysis & physical data

<table>
<thead>
<tr>
<th>Typical Physical Properties</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Gravity (g/cm³)</td>
<td>2.20</td>
</tr>
<tr>
<td>Bulk density</td>
<td>200 – 350 kg/m³</td>
</tr>
<tr>
<td>Absolute volume</td>
<td>0.0545 gal/lb</td>
</tr>
<tr>
<td>SiO₂</td>
<td>92 %</td>
</tr>
<tr>
<td>Particles &gt; 45 micron</td>
<td>Max 2.0 %</td>
</tr>
<tr>
<td>D50 (micron)</td>
<td>Ca. 0.20</td>
</tr>
</tbody>
</table>

Storage and handling
Packaged in big bags. Sacks available upon request. Avoid moisture during storage.

Quality assurance
Elkem's management system is certified to ISO 9001.

Sustainability
Elkem is committed to reduction in embodied carbon emission. For further information, please contact us to learn more about our sustainability roadmap.
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Additional information and contact
Should you have any questions, please contact an Elkem Silicon Products office near you for more information about the value of our product offering.
You can also send us an email at info.oilfield@elkem.no.