

Product data sheet

MICROLITE® L

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Description	MICROLITE® L is a slurry of amorphous, spherical microsilica with high surface area. It is pozzolanic and creates extra binder phases resulting in lower set-cement permeability. 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.														
Applications	The extremely fine particles of MICROLITE® L work as a packing agent (physically and chemically) between the cement particles and enhances the slurry and set cement properties. MICROLITE® L enhances fluid loss control, by reducing the permeability of the initial cement filter cake. MICROLITE® L consists of spherical shaped particles of up to 92 % of SiO ₂ . The particles are of submicron size, 0.20 µm. The production process of MICROLITE® L imposes larger chemical and particle size differences as compared to MICROBLOCK®.														
Features	<ul style="list-style-type: none"> • 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. • Proved beneficial in CO₂ wells. 														
Chemical analysis & physical data	<table border="0"> <thead> <tr> <th style="text-align: left;">Typical Physical Properties</th> <th style="text-align: left;">Value</th> </tr> </thead> <tbody> <tr> <td>Specific Gravity (g/cm³)</td> <td>1.35 - 1.40</td> </tr> <tr> <td>Solids content (weight %)</td> <td>48 - 52</td> </tr> <tr> <td>Viscosity (mPas)</td> <td>Max 100</td> </tr> <tr> <td>SiO₂</td> <td>Minimum 85 %</td> </tr> <tr> <td>Particles > 45 micron</td> <td>Max 2.0 %</td> </tr> <tr> <td>D50 (micron)</td> <td>Ca. 0.20</td> </tr> </tbody> </table>	Typical Physical Properties	Value	Specific Gravity (g/cm ³)	1.35 - 1.40	Solids content (weight %)	48 - 52	Viscosity (mPas)	Max 100	SiO ₂	Minimum 85 %	Particles > 45 micron	Max 2.0 %	D50 (micron)	Ca. 0.20
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Storage and handling	Product becomes unusable after freezing, even if thawed. Product is subject to settling and should be agitated prior to use. When stored correctly, the product has a shelf life of ca. 6 months.														
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.														
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 .														