


EOS LS	PRODUCT INFORMATION SHEET Emulsified Oils Family																		
<p><b>Description</b></p> 	<p>EOS LS is a concentrated, low salt emulsion, formulated to minimize the dramatic spike of dissolved sodium (Na) in the aquifer that is caused by many other injectable remediation products. EOS LS is designed to enhance anaerobic bioremediation of chlorinated solvents, nitrates, perchlorate, energetics, acid mine drainage and other recalcitrant chemicals in contaminated groundwater. EOS LS can also be used to reduce redox sensitive metals and radionuclides.</p> <p>EOS LS benefits:</p> <ul style="list-style-type: none"> <li>• The only low salt, food grade emulsified oil formulation on the market</li> <li>• Increased concentration of rapidly-biodegradable substrates to “jump start” bacterial growth</li> <li>• Slow release biodegradable substrates to promote long-term biological activity</li> <li>• Engineered for effective transport in the subsurface <ul style="list-style-type: none"> <li>• Small oil droplet size</li> <li>• Negative surface charge</li> </ul> </li> <li>• Neutral pH</li> </ul> <p>EOS LS incorporates the proven patented EOS® technologies that clients have trusted for more than a decade. Made in the USA with US farmed soybean oil.</p>																		
<p><b>Chemical &amp; Physical Properties</b></p>	<table> <tr> <th><b>Oil Emulsion Concentrate:</b> EOS LS</th><th><b>Typical</b></th></tr> <tr> <td>Refined and Bleached US Soybean Oil (% by wt.)</td><td>55</td></tr> <tr> <td>Rapidly Biodegradable Soluble Substrate (% by wt.)</td><td>8</td></tr> <tr> <td>Other Organics (emulsifiers, food additives, etc.) (% by wt.)</td><td>10</td></tr> <tr> <td>Specific Gravity</td><td>0.96 - 0.98</td></tr> <tr> <td>pH (Standard Units)</td><td>6.5 - 7.5</td></tr> <tr> <td>Median Oil Droplet Size (microns)</td><td>1.0</td></tr> <tr> <td>Organic Carbon (% by wt.)</td><td>73</td></tr> <tr> <td>Mass of Hydrogen Produced (lbs. H<sub>2</sub> per lb. EOS LS)</td><td>0.24</td></tr> </table>	<b>Oil Emulsion Concentrate:</b> EOS LS	<b>Typical</b>	Refined and Bleached US Soybean Oil (% by wt.)	55	Rapidly Biodegradable Soluble Substrate (% by wt.)	8	Other Organics (emulsifiers, food additives, etc.) (% by wt.)	10	Specific Gravity	0.96 - 0.98	pH (Standard Units)	6.5 - 7.5	Median Oil Droplet Size (microns)	1.0	Organic Carbon (% by wt.)	73	Mass of Hydrogen Produced (lbs. H <sub>2</sub> per lb. EOS LS)	0.24
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<p><b>Packaging</b></p>	<p>Shipped in 55-gallon drums, 275-gallon IBC totes or bulk tankers (40,000 lbs.)</p>																		
<p><b>Handling &amp; Storage</b></p>	<p>EOS LS is shipped as a ready-to-use concentrated emulsion that can be diluted with water in the field to prepare a high quality suspension for easy injection. EOS LS has a low viscosity and can be distributed with commonly available pumps or continuous metering with a diluter (e.g., Dosatron™). Dilution ratios for EOS LS commonly range from 4:1 to 20:1 (water: EOS LS) depending on site conditions. EOS LS injections should be followed with additional chase water to maximize distribution of EOS LS into the formation.</p> <p>For best performance, use EOS LS within 60 days of delivery and store at a temperature between 40°F (4°C) to 100°F (38°C).</p>																		