


EOS 450		PRODUCT INFORMATION SHEET Emulsified Oils Family																		
<div>Description</div> <div></div>	<p>EOS 450 is a food-grade oil/water emulsion that maximizes substrate value while enhancing anaerobic bioremediation of chlorinated solvents, perchlorate, energetics, acid mine drainage, oxidized metals and other recalcitrant chemicals in contaminated groundwater. EOS 450 can also be used to reduce redox sensitive metals and radionuclides. Providing basic support for sites with established microbial communities, EOS 450 is formulated with both rapidly-biodegradable substrates to accelerate bacterial growth and slow release biodegradable substrates to promote long-term biological activity and contaminant degradation.</p> <p>Due to its small oil droplet size and negative surface charge, EOS 450 can be effectively distributed throughout small and large target treatment zones. EOS 450 is shipped as a ready-to-use concentrate that can be easily diluted with water in the field. No complicated field mixing procedures are required – simply mix with water and inject. EOS 450 has a low viscosity and is amenable to distribution with commonly available pumps or continuous metering with a diluter (e.g., Dosatron™).</p> <p>EOS 450 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>																			
	<table><tr><td>Oil Emulsion Concentrate: EOS 450</td><td>Typical</td></tr><tr><td>Refined and Bleached US Soybean Oil (% by wt.)</td><td>45</td></tr><tr><td>Rapidly Biodegradable Soluble Substrate (% by wt.)</td><td>>5</td></tr><tr><td>Other Organics (emulsifiers, food additives, etc.) (% by wt.)</td><td>>1</td></tr><tr><td>Specific Gravity</td><td>0.96 - 0.98</td></tr><tr><td>pH (Standard Units)</td><td>6.0 - 7.0</td></tr><tr><td>Median Oil Droplet Size (microns)</td><td>1.0</td></tr><tr><td>Organic Carbon (% by wt.)</td><td>54</td></tr><tr><td>Mass of Hydrogen Produced (lbs. H₂ per lb. EOS 450)</td><td>0.18</td></tr></table>			Oil Emulsion Concentrate: EOS 450	Typical	Refined and Bleached US Soybean Oil (% by wt.)	45	Rapidly Biodegradable Soluble Substrate (% by wt.)	>5	Other Organics (emulsifiers, food additives, etc.) (% by wt.)	>1	Specific Gravity	0.96 - 0.98	pH (Standard Units)	6.0 - 7.0	Median Oil Droplet Size (microns)	1.0	Organic Carbon (% by wt.)	54	Mass of Hydrogen Produced (lbs. H ₂ per lb. EOS 450)
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<div>Packaging</div>	Shipped in 55-gallon drums, 275-gallon IBC totes or bulk tankers (40,000 lbs.)																			
<div>Handling & Storage</div>	<p>EOS 450 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 450 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 450 commonly range from 4:1 to 20:1 (water: EOS 450) depending on site conditions. EOS 450 injections should be followed with additional chase water to maximize distribution of EOS 450 into the formation.</p> <p>For best performance, use EOS 450 within 60 days of delivery and store at a temperature between 40°F (4°C) to 100°F (38°C).</p>																			