

**ELM Hydraulic Industrial (ISO 68)**  
**Part Number: HF-160**  
**Premium Biodegradable – Biobased Hydraulic Oils**



<b>DESCRIPTION</b>	ELM Biotechbased SoyFluid™ Hydraulic Industrial (ISO 46 & 68) are biodegradable hydraulic oils formulated with the best optimized USA grown natural seed oils that surpass the lubricity of most conventional oils. They protect against wear, have high flash points for safety and are virtually biodegradable.	
<b>BIOBASED – BIODEGRADABLE-NON- BIOACCUMULATIVE</b>	Based on evaluation of the base oils and the finished products, the ELM biobased products are designed to be biodegradable, aquatically non-toxic, not-bioaccumulative, and with no impact on plants as determined by known test methods. Nevertheless, the use of all of ELM products are subject to the local ordinances and ultimate responsibility for impact remains with the users.	
<b>APPLICATIONS</b>	<ul style="list-style-type: none"> <li>■ Recommended for all industrial hydraulic systems</li> <li>■ Particularly suited for use in hydraulic systems near water, in forestry, and in other environmentally sensitive areas</li> </ul>	
<b>BENEFITS</b>	<ul style="list-style-type: none"> <li>■ Reduce wear through superior thin-film protection</li> <li>■ Maintain stable viscosity through wide operating temperature range</li> <li>■ Protect all ferrous metal components from rust and corrosion.</li> <li>■ Have superior flash and fire points for increased safety</li> <li>■ Mostly benign when released into the environment</li> <li>■ Good seal compatibility</li> <li>■ Meet USDA's Biobased product definition for Executive Order 13101</li> <li>■ Conform to EPA's EPP criteria</li> <li>■ Conform to State of Iowa SF 2249 - Purchasing Preference for Biobased Lubricants</li> <li>■ Made from renewable USA-grown crop-based vegetable oils</li> </ul>	
<b>PERFORMANCE LEVELS</b>	<ul style="list-style-type: none"> <li>■ Exceed Vickers 20-VQ and 104C Vane Pump Tests</li> <li>■ Pass Vickers 35-VQ Vane Pump Test</li> </ul>	
<b>TYPICAL PROPERTIES</b>	ISO Viscosity Grade	68
	Viscosity at 40°C (cSt)	61-70
	Viscosity Index	190-200
	Flash Point, °C (°F)	280 (536)
	Pour Point, °C (°F)	-20 (-4) to -25 (-13)
	Rust & Corrosion ASTM D-130	1B
	Base Oil Biodegradability – OECD 301	Pass
	Base Oil Aquatic Toxicity – OECD 202	Non toxic
	Base Oil Plant Toxicity - OECD 208	Non toxic
<b>PACKAGING</b>	5 Gal. Pails 55 Gal. Drums 275 Gal. Totes	

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