



ECO ULTRA[®] LOW PARTICLE (LP) HYDRAULIC OILS

ECO ULTRA[®] Low Particle (LP) Hydraulic Oils are superior anti-wear hydraulic and circulating fluids blended with highly re-refined Group II base oils. These hydraulic oils provide outstanding resistance to sludge formation and exhibits excellent antiwear protection. The rust and oxidation preventive capabilities, including superior demulsibility properties, make these oils rugged, even in high-output systems, that require a high level of fluid cleanliness. These oils are repeatedly filtered reaching a maximum cleanliness level of 17/15/11. These oils also feature excellent vane pump and piston pump performance, anti-foam characteristics and superior hydrolytic stability. In addition to having excellent performance these oils also exhibit inherently biodegradability characteristics.

ECO ULTRA LP Hydraulic Oils resist deterioration and perform at superior levels, even at high operating temperatures, pressures and speeds and low pour point ensures easy system start-up in cold conditions.

<u>PROPERTY</u>	<u>ASTM TEST METHOD</u>	<u>ISO #32</u>	<u>ISO #46</u>	<u>ISO #68</u>
Viscosity @ 40°C, cSt	D445	32.9	46.5	68
Viscosity @ 100°C, cSt	D445	5.5	6.80	8.5
Viscosity Index	D2270	102	102	102
Flash Point, COC, °C (°F)	D92	212 (414)	220 (428)	242 (468)
Pour Point, °C (°F)	D97	-34 (-30)	-30 (-22)	-24 (-11)
Color	D1500	1.0	1.0	1.5
Gravity, °API	D4052	31.3	30.4	30.0
Turbine Oil Oxidation	D943	3680	3540	3500
Rust Test	D665	Pass	Pass	Pass
Emulsion Test	D1401	40-40-0	40-40-0	40-40-0
Biodegradability %	D5864	28.2	28.0	28.0
Fluid Cleanliness, Max.	ISO 4406	17/15/11	17/15/11	17/15/11

Meets or exceeds the following tests and requirements:

- AFNOR E 48-603
- B. F. Goodrich - 0152
- Cincinnati Milacron - P-68, P-69, P-70
- Denison - HF-0, HF-1, HF-2
- DIN 51524, Part 2
- Ford - M-6C32
- General Motors - LH-04-1, LH-06-1, LH-15-1
- Jeffrey - #87
- Lee Norse - 100-1
- Racine - Model S, variable volume vane pump
- U.S. Steel - 136, 127
- Vickers - I-286-S, M-2950-S, 35VQ25
- Inherently Biodegradable

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