



# TECHNICAL DATA SHEET

## EARTHKEEPER® HYDRAULIC OIL BIODEGRADABLE HYDRAULIC OIL

Earthkeeper® Hydraulic Oil is a premium quality, environmentally responsible hydraulic fluid designed to provide exceptional performance in both industrial and mobile hydraulic systems. This vegetable based formulation satisfies the most rigorous criteria for biodegradability and low toxicity. Earthkeeper® Hydraulic Oil has the necessary anti-wear characteristics for hydraulic systems operating under high load and high pressure. It is also treated with additives that protect against rust and corrosion.

Earthkeeper® Hydraulic Oil meets the definition of a biobased lubricant as outlined in section 9001 of The Farm Security and Rural Investment Act (FSRIA) of 2002 (Public Law 107-171/ HR 2642) and qualifies for preferred procurement by U.S. Federal Agencies as set forth in FSRIA section 9002.

### BENEFITS:

- WEAR PROTECTION – equal or superior to conventional mineral oil based fluids
- RUST PROTECTION – protects against rust and corrosion.
- TEMPERATURE STABLE – easy cold starts and less thinning out at high temperatures.
- SECURITY – easily passes all tests for biodegradability and is classified as “Readily Biodegradable”.

### APPLICATIONS:

Earthkeeper® Hydraulic Oil is suitable for use in all hydraulic systems and anywhere a vegetable-based lubricant is preferred.

ASTM #		TYPICAL CHARACTERISTICS				
	Grade	ISO 32	ISO 46	ISO 68	ISO 100	ISO 150
D-445	<b>Kinematic Viscosity</b>					
	cSt @ 40°C	34.15	47.26	70.10	99.00	141.80
	cSt @ 100°C	7.85	10.82	15.67	21.08	29.00
D-2161	<b>Saybolt Viscosity</b>					
	SUS @ 40°C	172.20	236.64	350.20	495.00	710.00
	SUS @ 100°C	52.44	62.94	81.92	105.00	141.00
D-2270	<b>Viscosity Index</b>	212	229	239	240	245
D-97	<b>Pour Point, °F (°C)</b>	<-30 (-34)	<-30 (-34)	<-30 (-34)	<-30 (-34)	<-30 (-34)
Gardner Method	<b>Density, lb/gal @ 60°F (15.5°C)</b>	7.68	7.68	7.68	7.70	7.70
	<b>Specific Gravity, g/cc @ 60°F (15.5°C)</b>	0.9212	0.9212	0.9212	0.9236	0.9236
D-92	<b>Flash Point, °F (°C)</b> Cleveland Open Cup	415 (213)	420 (216)	410 (210)	415 (213)	415 (213)
D-4172	<b>Four Ball Wear</b> Scar Wear, mm	0.39	0.40	0.45	0.53	0.48
D-665	<b>Rust Test</b>	Pass	Pass	Pass	Pass	Pass
D-130	<b>Copper Strip Corrosion</b> 212°F (100°C) @ 3 hr	1B	1B	1B	1B	1B

*The above are average values. Minor variations which do not affect product performance are to be expected in normal manufacturing.*

### PACKAGING

Shuttle Tanks	Drums	Pails
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### THE WHITMORE MANUFACTURING COMPANY

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