KLONDIKE ENVIRO AW Inherently Biodegradable Hydraulic Fluids



PRODUCT DESCRIPTION

KLONDIKE ENVIRO AW Inherently Biodegradable Hydraulic Fluids are premium, long life formulations designed for high performance hydraulic systems. These advanced fluids provide outstanding operating and maintenance benefits for increased productivity and long service life.

APPLICATIONS

KLONDIKE ENVIRO AW Inherently Biodegradable Hydraulic Fluids are designed as an environmentally safer alternative to conventional zinc based hydraulic fluid and is an excellent high pressure, high temperature power transfer fluid where vane, piston, and gear pumps are utilized. This fluid may also be used as a general purpose lubricant where straight mineral oils and conventional rust and oxidation inhibited oils are recommended in the appropriate viscosity grade. Such industrial applications may include (but are not limited to) machine tools, presses, die casting and injection molding machines among others.

Typical applications for KLONDIKE ENVIRO AW Inherently Biodegradable Hydraulic Fluids include (but are not limited to):

- Heavy duty mobile and stationary equipment in exploration, construction, agriculture, marine, logging and mining industries.
- Specialized hydraulic pump systems with silver bearings as there is no zinc to displace the silver.
- Multi-use industrial equipment lubricant for plain/ anti-friction bearings, air-line lubricators and other such uses.



FEATURES AND BENEFITS

KLONDIKE ENVIRO AW Inherently Biodegradable Hydraulic Fluids are formulated using ultra-pure paraffinic base oils and high performance ashless additive technology. This shear stable fluid has outstanding resistance to viscosity breakdown in the presence of heavy mechanical stress, high temperature, and high pressure resulting in optimum viscosity retention across the life of the fluid.

Zinc Free (ashless) additive technology utilizes specialized antiwear and friction modifying chemistry to achieve outstanding results in all key hydraulic component wear tests as well as a proprietary blend of metal passivator, demulsifier, rust inhibitor, and anti-foam agents for extended fluid life. Standard viscosity index and low pour point allows year round use in most climates. This reduces the need for seasonal fluid changes for superior fluid economy.

KLONDIKE ENVIRO AW Hydraulic Fluid is non-toxic (OECD 203 aquatic toxicity test), is inherently biodegradable (OECD 301B), and passes the EPA Static Sheen Test. These features offer high performance fluid which will minimize environmental impact and have low environmental persistence. This greatly reduces the immediate and long-term environmental impact of the fluid in the event of an oil spill.

Meets industry requirements where environmentally sensitive fluids are necessary and recommended for use where fluids with low acute aquatic toxicity or low environmental persistence are preferred.

- **Smooth operation** excellent fluid stability and viscosity retention for smooth power transfer.
- Optimal oil service life high resistance to fluid oxidation and deposit formation for long expected service life.
- **Zinc-free chemistry** non corrosive to silver and yellow metals found in some pumps.
- Low environmental impact non-toxic chemistry with no heavy metals to contaminate water or soil.

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SPECIFICATIONS AND APPROVALS

KLONDIKE ENVIRO AW Inherently Biodegradable Hydraulic Fluids meets the requirements of the following specifications and is recommended for use in (but not limited to):

- Denison HF-0, HF-1, HF-2
- Eaton E-FDGN-TB002-E
- General Motors LS-2
- Cincinnati Machine P-68 (ISO 32), P-69 (ISO 68), P-70 (ISO 46)
- Bosch Rexroth RDE 90245
- DIN 51524 Part I and II
- ISO 11158 Categories HH, HL, HM and HR

TYPICAL TECHNICAL PROPERTIES					
PROPERTY	TEST METHOD	ENVIRO AW 22	ENVIRO AW 32	ENVIRO AW 46	ENVIRO AW 68
Specific @ 15.6°C	ASTM D4052	0.85	0.86	0.86	0.87
API Gravity	ASTM D287	33.5	32.5	31.5	30.7
Viscosity @ 40°C, cSt	ASTM D445	22	32	46	68
Viscosity @ 100°C, cSt	ASTM D445	4.35	5.5	7.15	8.77
Viscosity Index	ASTM D2270	102	108	108	100
Pour Point, °C	ASTM D5950	-43	-40	-38	-35
Flash Point, COC, °C	ASTM D92	220	220	230	236
Oxidation Life	ASTM D943	8000	8000	8000	6000
Dielectric Breakdown Voltage, kV*	ASTM D877	>45	>45	>45	>45
Biodegradability, %	OECD 301B	>30	>30	>30	>30

Other applicable uses may exist. Please contact KLONDIKE for more information.

All stated properties are typical of standard production and may vary. KLONDIKE reserves the right to change product specifications and/or performance properties at its discretion and without notice.

^{*}Dielectric strength value applies only at the point of manufacture of packaged goods. (Does not apply to bulk packaging). Any oil will quickly lose its dielectric strength when exposed to even minor contamination. KLONDIKE is not responsible for dielectric value after any packaged product is opened. Values reported have been verified by professional third party testing. However, industry standard test method for measuring kV values is variable and test results may differ.

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HEALTH AND SAFETY

This product is not expected to have adverse health implications when used for its intended application. For detailed information on safe handling of this product, refer to its Material Safety Data Sheet (MSDS). To obtain an MSDS on this or any other KLONDIKE product, please visit www.klondikelubricants.com or call 1-877-293-4691. When disposing of used product, be responsible to the environment.

BRAVING THE FORCE OF MOVEMENT

KLONDIKE stands for robust, reliable, high quality products tailored to suit the requirements of the on- and off-road heavy duty, automotive and industrial markets. Our solutions span from trend-setting retail lubricants through small-batch custom formulations to large bulk orders ready for immediate delivery.

The extensive KLONDIKE product range includes premium oils, lubricants, greases, chemicals and specialty fluids formulated with virgin base oils and protective inhibitors. Designed to handle the most extreme climates and operating conditions, the KLONDIKE products protect and extend the life of your equipment, optimize performance and improve productivity while meeting and exceeding industry standards and specifications.

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