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Product Data Sheet



NOTE: The information in this publication is the result of careful testing in our laboratories, complemented by selected literature. It does not in any way constitute a guarantee, nor does it serve as a license to operate any patent. Due to widely varying conditions of product use, which are beyond our control, it is strongly recommended that the product be tested for suitability. Product typical properties in this publication are current.

BIODEGRADABLE HYDRAULIC OIL

EnviroTech® EAL H-46 Extreme

EnviroTech® EAL H-46 Extreme hydraulic oil is a zinc-free premium EAL - Environmentally Acceptable Lubricant designed to provide exceptional performance in hydraulic and circulation systems. This bio-synthetic formulation of High Oleic Base Stocks is engineered to meet or exceed the performance requirements of most vane, piston and gear-type pump and system manufacturers, while satisfying the rigorous criteria for biodegradability and toxicity. It offers superior anti-wear and film strength characteristics necessary for hydraulic systems operating under high load and high pressure. EnviroTech® EAL H-46 Extreme has a zinc-free additive system and is inhibited for excellent protection against rust and corrosion. In addition to its excellent performance capability, EnviroTech® EAL H-46 Extreme hydraulic oil satisfies the requirements for ultimate biodegradability and non-toxicity making it an excellent choice for hydraulic and circulation systems operating in environmentally sensitive areas. Base oils and additives in this product pass and exceed the acute toxicity (LC-50) criteria adopted by the U.S. Fish and Wildlife Service and the U.S. EPA.

EnviroTech® EAL H-46 Extreme hydraulic oil meets the definition of a bio-based 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.

EnviroTech® EAL H-46 Extreme complies with the “biodegradable”, “minimally-toxic” and “not bioaccumulative” standards as defined in Appendix A of the 2013 Vessel General Permit issued by the United States Environmental Protection Agency.

Physical Properties

PRODUCT	EAL H-46 Extreme
ISO Grade	46
Viscosity	
@ 40°C, cSt	47.1
@ 100°C, cSt	9.4
Viscosity Index	188
Specific Gravity	0.9028
Flash Point, °F (°C)	536 (280)
Fire Point, °F (°C)	597 (314)
Pour Point, °F (°C)	-22 (-30)
4-Ball Wear, mm	0.35
FZG Gear Test,	12
Emulsion Tendency	40/40/0 (15)
Biodegradation Classification	Ultimate Pw1
VGP/EAL Compliant	Yes

Prior to transitioning equipment on board vessels to **EnviroTech® EAL H-46 Extreme**; the ship owner/operator should verify with the equipment manufacturer that the sealing system is compatible for use with an EAL.

EnviroTech® EAL H-46 Extreme does not produce an iridescent appearance (sheen) on the surface of the water when tested in accordance with the U.S. Coast Guard Static Sheen Test.

Shelf Life: Product shelf life is 3 years from the date of manufacture, after which the product should be re-certified prior to use.