

# EnviroTech® EAL H Series

Biodegradable hydraulic oil



## Your benefits at a glance

- Environmentally responsible
- Operates under high load and high pressure
- Excellent protection against rust and corrosion

## Your requirements - our solution

EnviroTech EAL H Series hydraulic oils are zinc-free ashless premium environmentally responsible hydraulic fluids designed to provide exceptional performance in hydraulic and circulation systems. These biosynthetic formulations have been engineered to meet or exceed the performance requirements of most hydraulic pump and system manufacturers, while satisfying the rigorous criteria for biodegradability and toxicity. They offer the anti-wear and film strength characteristics necessary for hydraulic systems operating under high load and high pressure. EnviroTech EAL H hydraulic oils are inhibited for excellent protection against rust and corrosion. In addition to their excellent performance capability, EnviroTech EAL H hydraulic oils satisfy the requirements for ultimate biodegradability and non-toxicity making them an excellent choice for hydraulic and circulation systems operating in environmentally sensitive areas. Base oils and additives in these products 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 Series hydraulic oils meet 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.

EnviroTech EAL H Series 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.

## Application notes

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

EnviroTech EAL H Series lubricants do 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.

## Material safety data sheets

Material safety data sheets can be requested via our website <https://www.klsummit.com>. You may also obtain them through your contact person at Summit Lubrication.

Characteristics	EnviroTech EAL H-32	EnviroTech EAL H-46	EnviroTech EAL H-68	EnviroTech EAL H-100
Article number	340214	340215	340216	340387
Vessel General Permit	passed	passed	passed	passed
Demulsifying capacity	40/40/0 (10) (min)	40/40/0 (10) (min)	40/40/0 (10) (min)	40/40/0 (10) (min)
Density	0.88 g/cm <sup>3</sup>	0.88 g/cm <sup>3</sup>	0.88 g/cm <sup>3</sup>	0.91 g/cm <sup>3</sup>
Dielectric strength	46 kV/mm	40 kV/mm	40 kV/mm	40 kV/mm
Fire point	263 °C	266 °C	271 °C	280 °C
Flash point	236 °C	260 °C	251 °C	235 °C
Kinematic viscosity, 100°C	6.8 mm <sup>2</sup> /s	9.7 mm <sup>2</sup> /s	12.6 mm <sup>2</sup> /s	16.8 mm <sup>2</sup> /s
Kinematic viscosity, 40°C	31.0 mm <sup>2</sup> /s	43.8 mm <sup>2</sup> /s	64.2 mm <sup>2</sup> /s	92.4 mm <sup>2</sup> /s
Viscosity index	187	215	199	199

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Pour point, DIN ISO 3016, ASTM D97, ASTM D5950, ASTM D7346, based on standard	-40 °C	-38 °C	-38 °C	-31 °C
Four-ball tester: wear characteristics	0.38 mm	0.35 mm	0.34 mm	0.35 mm
FZG scuffing test	12	12	12	12
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 months	36 months	36 months	36 months

## Summit Lubrication

Your expert in specialty lubricants. Since 1982, we have partnered with you to bring you the right solution and advanced lubrication technologies. With over 500 products, from air and gas compressor oils to refrigeration oils, we develop top-of-the-line products tailored to your specific needs. Your success is our success.

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