# JAX BIO-GUARD<sup>™</sup> HYDRAULIC FLUIDS

VGP Premium Biodegradable Hydraulic Fluids

# **PRODUCT DESCRIPTION**

JAX Bio-Guard Hydraulic Fluids are premium synthetic lubricants designed to maximize hydraulic performance while minimizing environmental impact.

JAX Bio-Guard Hydraulic Fluids are readily biodegradable when subjected to water, sunlight, and microbial activity. Due to its biodegradability, low toxicity, and low bio-accumulation, JAX Bio-Guard Hydraulic Fluids meet the requirements of US EPA 2013 Vessel General Permit (VGP) and the more recent Vessel Incidental Discharge Act (VIDA). These lubricants are recommended on vessels and in environmentally sensitive locations that require an EAL lubricant.

# **PRODUCT BENEFIT**

- **Biodegradability**–JAX Bio-Guard Hydraulic Fluids are formulated using synthetic base stocks and additives that provide a readily biodegradable fluid. This unique formulation has proven to outperform the vegetable oil-type biodegradable hydraulic oils typically seen on the market.
- Excellent High and Low Temperature Performance The high viscosity indices and low pour points of JAX Bio-Guard Hydraulic Fluids allow for extended temperature protection and performance. JAX Bio-Guard Hydraulic Fluids are fluid at cold temperatures, providing easier startups, quick lubricant circulation and limiting the need for sump heaters. At higher temperatures, JAX Bio-Guard Hydraulic Fluids maintain a sufficient lubricating film, reducing metal-to-metal contact and component wear.
- Superior Additive Performance–JAX's advanced additive technology enhances the oils' performance. The non-detergent, ashless antiwear additives in JAX Bio-Guard Hydraulic Fluids provide an additional layer of protection against wear in severe conditions. Rust inhibitors protect critical components against corrosion in the presence of water or process contaminants, antioxidants increase the oils' oxidation resistance, which extends lubricant life, and the foam suppressants prevent unwanted foaming and air entrapment. JAX's unique combination of synthetic, biodegradable base stocks and additives extends service life and operating temperatures while providing clean, problem-free operation.



## APPLICATIONS

- Hydraulic applications on seaborne transit vessels
- Mobile dredging equipment
- Any application where there is preferred or mandated use of EAL classified lubricants





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TYPICAL PROPERTIES	ISO 32	ISO 46	ISO 68	METHOD
Viscosity @ 40°C, cSt	32.4	46.8	67.5	ASTM D 445
Viscosity @ 100°C, cSt	7.0	9.3	12.1	ASTM D 445
Viscosity Index	183	187	179	ASTM D 2270
Pour Point, °F (°C)	-65 (-54)	-51 (-46)	-67 (-55)	ASTM D 97
Flash Point, °F (°C)	396 (202 <mark>)</mark>	626 (330)	590 (310)	ASTM D 92
Copper Strip Corrosion	1a	1b	1a	ASTM D 130
Modified Sturm	Readily Biodegradable	Readily Biodegradable	Readily Biodegradable	OECD 301B

JAX products undergo continual improvement in formulation and manufacture. The values indicated in this PDS are typical production values at the time of this writing. JAX reserves the right to alter and update product data and typical values at any time without notice. It is the responsibility of the installer and/or purchaser to determine if these specifications are adequate and proper for the intended application. MSDS information may be found at jax.com or by contacting JAX INC.

### COMPATIBILITY

JAX Bio-Guard Hydraulic Fluids are compatible with mineral oil-based lubricants, most synthetic-based lubricants, and seal materials commonly found in hydraulic systems.

It is recommended that the system be thoroughly drained and, if warranted, cleaned prior to switching to JAX Bio-Guard Hydraulic Fluids.

#### PACKAGING

CONTAINER SIZE	ISO 32	ISO 46	ISO 68
275 Gallon Soft Tote	BGHFH-275	BGHFJ-275	BGHFK-275
275 Gallon Cage Tote	BGHFH-275H	BGHFJ-275H	BGHFK-275H
55 Gallon Drum	BGHFH-055	BGHFJ-055	BGHFK-055
16 Gallon Keg	BGHFH-016	BGHFJ-016	BGHFK-016
5 Gallon Pail	BGHFH-005	BGHFJ-005	BGHFK-005
Gallon (4/cs)	BGHFH-004	BGHFJ-004	BGHFK-004