

# BIOFLO HYDRO TO

**Overview:** BioFlo Hydro TO is a natural ester, High Oleic turbine oil specifically designed for high performance. It offers extended oil life in lube oil systems and high thermal and oxidative stability. Friction and wear of parts are minimized with the use of BioFlo Hydro TO. These oils have naturally occurring solvency which restricts the formation of sludge and varnish. Product passes OECD 301B standards for biodegradability. Available in ISO grades 46 and 68.

## Specifications, Approvals, Recommendations:

- Classified as Environmentally Acceptable Lubricants (EALs) as per the EPA's 2013 U.S. Vessel General Permit (VGP)
- NOT FOR USE IN GAS TURBINES**

Physical Properties	46	68
ISO Grade	46	68
Specific Gravity, ASTM D1298	0.87	0.89
Viscosity, ASTM D445 @40°C, cSt	46	68
Viscosity, ASTM D445 @100°C, cSt	8.7	11.2
Viscosity Index (VI), ASTM D2270	>180	>180
Pour Point, ASTM D97, °F (°C)	-30 (-34)	-30 (-34)
Flash Point, ASTM D92, °F (°C)	>590 (310)	>570 (299)
FZG Load Stage, DIN 51354	12	12
Copper Corrosion, ASTM D4048	1A	1A
Rust Test, ASTM D665, A & B	PASS	PASS
Demulsibility, ASTM D1401, 20 minutes	42-38-0	42-38-0
Dielectric Breakdown Voltage, ASTM D877, kV	>35	>35
<b>Environmental Stewardship: Meets EPA requirements to be classified as an EAL per the 2013 VGP</b>		
Biodegradable (meaning>60%) OECD 301B, %	PASS >80	PASS >80
Minimally Toxic	PASS	PASS
OECD 201 - Algae (EC 50), 72 hr, mg/L	>13,000 mg/L	>13,000 mg/L
OECD 202 - Daphnia (EC 50), 48 hr, mg/L	>25,000 mg/L	>25,000 mg/L
OECD 203 - Fish (LC 50), 96 hr, mg/L	>50,000 mg/L	>50,000 mg/L
Not Bioaccumulative* [*Calculated value as per EPA standard]	PASS	PASS
<b>Additional Environmental Features and Characteristics</b>		
Bio-based Content, ASTM D6866, %	>80	>80

**Applications & Industries:** Specifically formulated for Hydro Electric power station Turbines and Governors.

