Renewable Lubricants, Inc.
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Bio-SynXtra™ PowerLift Hydraulic Fluid

Biobased Low-Temperature Hydraulic Fluid for Snow Plows, Lifts, Booms, Gates, and Wheelchair Systems

Bio-SynXtra™ PowerLift Hydraulic Fluid is a readily biodegradable, high-performance biobased fluid designed for environmentally sensitive hydraulic applications. Formulated with patented Stabilized™ HOBS, this product delivers superior performance in extreme cold while exceeding requirements for anti-wear, rust, oxidation, foam control, and demulsibility. It is engineered to replace traditional mineral oil-based fluids, and is particularly effective in low-temperature systems requiring ISO 15–22 viscosity grades. This fluid can also replace obsolete MIL-PRF-5606 specs for ground support equipment.

Benefits

- Readily biodegradable, environmentally non-toxic, not bioaccumulative
- Performs in extremely cold conditions (Pour Point: -60°C)
- Zinc-free formula exceeds FZG Load Stage 10 for wear protection
- Resists rust and corrosion in both fresh and saltwater (ASTM D-665 A & B)
- High dielectric strength (45 kV)
- Super high viscosity index (214) ensures multi-grade performance
- Excellent demulsibility and foam control
- Exceeds EPA VGP 2013 and ISO 15380 EAL standards
- Provides long-term oxidation stability

Application / New Filling

Recommended for:

- Hydraulic systems in snow plows, utility lifts, wheelchair lifts, booms, lift gates, and stands
- Ground support equipment requiring light viscosity or SAE 0W fluid for cold flow
- Replacement of MIL-PRF-5606 spec fluids in non-aviation ground equipment
- OEMs recommending ISO 15–22 fluids with enhanced environmental performance

STABILIZED™ by Renewable Lubricants

Specifications and Approvals

- Meets 2013 EPA VGP (Environmentally Acceptable Lubricants – EALs)
- ASTM D 5864 Ultimately Biodegradable
- OECD 301B Readily Biodegradable
- Not bioaccumulative, low toxicity: LC-50 / EC-50 > 1000 ppm

- Patented Stabilized™ HOBS technology
  - U.S. Patents: 6,383,992 and 6,534,454
  - Additional pending and foreign patents

Typical Specifications	
Viscosities (ASTM D-445)	
@100°C., cSt.	4.7
@40°C., cSt.	17.19
@-40°C., cSt.	1900
Viscosity Index (ASTM D-2270)	214
Low Temperature Stability (ASTM D-6351)	Pass
Flash Point, COC, °C (ASTM D-92)	188
Pour Point, °C (ASTM D-97)	-60
Acid Number (ASTM D-664)	0.4
Dielectric Strength (KV)	45
Copper Corrosion (ASTM D-665)	1A
4 Ball Wear (ASTM D-4172) 1h, 167°F, 1200 RPM, 40kg	.40
Demulsibility (ASTM D-1401)	40/40/0
Foam Sequence I, II, III (ASTM D-892)	0
Rust Prevention, (ASTM D-665 A&B)	Pass
Galvanic Corrosion FTM 791-5322	Pass
Oxidation Stability (ASTM D-6186)	
PDSC minutes @180°C	25
PDSC minutes @155°C	95