

Bio-Food Grade™ Hydraulic Fluids

(ISO 32, 46, 68, 100)

Bio-Food Grade™ Hydraulic Fluids are readily biodegradable biosynthetic-blend lubricants designed for food processing, agriculture, marine, and other environmentally sensitive applications. Formulated with Stabilized™ (HOBS) technology, these fluids deliver exceptional anti-wear performance, rust and oxidation resistance, and high viscosity index. Fully compliant with NSF H1 food contact standards and manufactured under kosher supervision, Bio-Food Grade™ Hydraulic Fluids contain no animal byproducts and provide environmentally responsible lubrication in a variety of hydraulic and gear systems.

Benefits

- NSF-registered H1 for incidental food contact
- Readily biodegradable, environmentally non-toxic, not bioaccumulative
- High viscosity index for superior shear and thermal stability
- Excellent anti-wear and rust protection performance
- Low volatility for increased fire and flash point safety
- Kosher certified; No animal byproducts
- Compliant with U.S. EPA Vessel General Permit (EALs)
- Compatible with vane, piston, and gear-type pumps
- Suitable for GL-1, GL-2, and GL-3 applications (ashless)

Application / New Filling

- Ideal for hydraulic systems, gear drives, roller chains, gearhead motors, air-tools, circulating systems, and machine lubrication in food processing areas
- Approved for USDA H1 use, including tank closures, gasket sealing, and anti-rust films on food contact surfaces
- Compliant with Military Specification DOD-L-24651 Type I for general-purpose and gear oil lubricants
- For changeover guidelines, consult Renewable Lubricants, Inc.

Specifications and Approvals

- NSF H1 Registered
- Kosher certified
- USDA BioPreferred Certified
- DOD-L-24651 Type I Compliant
- Meets/exceeds DIN 51524 Part 2

- Meets Vickers M-2950-S (35VQ-25), I-286-S (V-104C), Rexroth, US Steel 126, 127, 136
- Ashless gear oil compatibility: GL-1, GL-2, GL-3
- EPA VGP 2013 EAL Compliant
- Readily Biodegradable >60% (ASTM D-5864)
- Ecotoxicity LC50/EC50 >1000 ppm (fish, daphnia, algae)



Typical Data

ISO grade	32	46	68	100
AGMA Grade	N/A	1	2	3
ASTM Grade	150	215	315	465
Specific Gravity @60°F. (D287)	.875	.877	.880	.880
VISCOSITIES:				
@100°C., cSt. (D-445)	7.0	9.0	12.9	18.0
@40°C., cSt. (D-445)	33.7	45.0	67.9	98.4
Viscosity Index (D-2270)	180	186	194	202
Flash Point, COC, °C (D-92)	245	251	260	264
Pour Point, °C (D-97)	-40	-38	-33	-31
Copper Corrosion 3hr @ 100°C (D-130)	1A	1A	1A	1A
Acid Number (D-974)	1.1	1.1	1.1	1.1
4-Ball Wear, mm (D-4172)	.40	.40	.40	.40
4-Ball EP Weld Point (kg)	160	160	160	160
4-Ball EP Load Wear Index	47	47	47	47
FZG Test (DIN 51354)	11	11	11	11
Demulsibility (D-2711)	40/40/0	40/40/0	40/40/0	40/40/0
Foam Sequence I, II, III (D-892)	< 30/0 Foam	< 30/0 Foam	< 30/0 Foam	< 30/0 Foam
Rust Prevention (D-665 A & B)	Pass	Pass	Pass	Pass
Dielectric Strength, kV (D-877)	>40	>40	44	41
Oxidation RPVOT (D-2272) Minutes	>250	>250	>250	>250
RLI Product Item #	87120	87130	87140	87150
NSF Registration H1, H2	140349	140347	140348	140350

F.O.B: Hartville, Ohio

Availability: 1 Gallon, 5 Gallon Pail, 55 Gal Drum, Totes, Bulk

