

Bio-Bottle Jack™ Hydraulic Fluid

(ISO 32)

Biobased, Environmentally Acceptable Hydraulic Fluid for Lifting Systems

Bio-Bottle Jack™ Hydraulic Fluid is an ISO 32 viscosity grade, readily biodegradable biosynthetic-blend hydraulic oil designed to directly replace petroleum-based fluids in jack and lift systems. Formulated for use in both mobile and stationary equipment, this environmentally friendly fluid meets and exceeds OEM performance standards for anti-wear, oxidation stability, rust prevention, and demulsibility. Its patented Stabilized™ HOBS technology delivers high viscosity index and superior performance in extreme conditions, while offering exceptional compatibility with conventional petroleum hydraulic fluids and elastomers.

Benefits

- Readily biodegradable, non-toxic, not bioaccumulative
- Compatible with petroleum-based fluids and standard system materials (Buna N, Viton, Neoprene)
- Excellent oxidation stability and rust prevention
- Outstanding anti-wear and anti-foam performance
- Superior water separation and corrosion resistance in fresh and sea water
- Increased flash and fire safety due to low volatility base stocks
- Compliant with EPA 2013 VGP (Environmentally Acceptable Lubricants)
- Exceeds acute toxicity standards (LC-50 / EC-50 > 1000 ppm)

Application / New Filling

- Hydraulic vane, piston, and gear pumps
- Bottle jacks, floor jacks, hand jacks, pallet jacks
- Hydraulic lift gates, safety gates, tilt cab systems, stadium gates
- ISO 32 specified hydraulic applications
- Forklift and material handling systems

Specifications and Approvals

- EPA VGP 2013 (EAL Compliant)
- ASTM D-5864: Ultimate Biodegradable
- OECD 301B: Readily Biodegradable
- Meets/exceeds
 - Vickers M-2950-S, I-286-S, 35VQ-25, V-104C (ASTM D-2882)
 - US Steel 126, 127
 - DIN 51524 Part 2
 - USDA Biopreferred



Bio-Bottle Jack™ Hydraulic Fluid ISO 32

TYPICAL SPECIFICATIONS	METHOD	ISO 32	Spec. Requirements
Specific Gravity @ 15.6°C	ASTM D-287	0.88	Report
Viscosity @ 40°C	ASTM D-445	30.5	Note 1
Viscosity @ 100°C	ASTM D-445	6.7	Note 1
Viscosity @ -25°C, Brookfield	ASTM D-2983	1,400 cP	Note 1
Viscosity Index	ASTM D-2270	186	90 (min)
Pour Point	ASTM D-97	-35°C	Note 1
Flash Point (COC)	ASTM D-92	232°C	198°C (min)
Fire Point (COC)	ASTM D-92	255°C	218°C (min)
Foam Sequence I, II, III (10 min)	ASTM D-892	0 Foam	0 Foam
Rust Prevention	ASTM D-665		
Distilled Water		Pass	Pass
Syn. Sea Water		Pass	Pass
Copper Corrosion Strip 3hr @ 100°C	ASTM D-130	1A	DIN 51524 2(max)
Rotary Bomb Oxidation, (minutes)	ASTM D-2272	272	USS 120 (min)
Neutralization Number mg KOH/g	ASTM D-974	0.5	1.5 (max)
Swell of Synthetic NBR-L Rubber, % (Avg.)	DIN 53538, Part		
Volume Change (%)	1	6.0	0 to 12
Shore A Hardness Change (%)		-4	0 to -7
	ASTM D-1401		
Demulsibility, ML Oil/Water/Emulsion		40/ 40/0 <10 minutes	40/37/3 (max) (30 minutes)
	ASTM D-4172		
4-Ball Wear, 1h, 167°F, 1200 RPM, 40 kg		0.40	USS 127 0.5 (max)
	DIN 51354		
FZG Test		11	US.Steel 10 (min)
<u>Biodegradation Classification</u>	ASTM D-5864	Ultimate PW1	Ultimate PW1
	OECD 301B	Readily	Readily
<u>Environmentally Friendly</u>	ISO 15380	yes	meets/exceeds over 50%
<u>USDA Biobased Tested</u>			
	New Carbon	yes	
<u>Note 1 Viscosity Sufficient for Application</u>			
<u>Note 2 Not Required</u>			

Availability

Item #:

F.O.B. :Hartville, Ohio, USA 1 Quart 1 Gallon 5 Gal Pail Drum Totes Bulk

81631 81633 81634 81636 81637 81639