



*The First in Synthetics®*

## Biodegradable Hydraulic Oil ISO 46

**Provides Outstanding Protection  
and High Biodegradability**



### **PRODUCT DESCRIPTION**

AMSOIL Biodegradable Hydraulic Oil (BHO) is a premium performance hydraulic oil designed to biodegrade when subjected to sunlight, water and microbial activity. Manufactured with a high quality blend of oleic vegetable oils and customized synthetic esters, it meets the U.S. Federal bio-based procurement guidelines as defined in Section 9002 of the Farm Security and Rural Investment Act of 2002 (FSRIA).

AMSOIL Biodegradable Hydraulic Oil exhibits high biodegradability and low aquatic toxicity, along with superior oxidative stability, low temperature performance and outstanding results in laboratory and extended duration pump testing. It contains anti-oxidants that ensure long oil life and foam inhibitors that promote problem-free operation. It is hydrolytically stable and ideal for use where water contamination is a problem.

Carefully designed additives help prevent pump wear and protect critical components from rust. AMSOIL Biodegradable Hydraulic Oil meets the stringent Vickers M-2950-S and I-286-S hydraulic oil specifications.

### **APPLICATION RECOMMENDATION**

AMSOIL Biodegradable Hydraulic Oil is recommended for stationary and mobile applications using gear, vane and piston hydraulic systems operating under high pressure and temperatures up to 180°F. It should also be used where high biodegradability and low aquatic toxicity are desired. Typical applications include construction, logging and farming equipment, lawn and turf care or anywhere leaking, spills or ruptured hydraulic lines may present an environmental hazard.

AMSOIL Biodegradable Hydraulic Oil is compatible with most synthetic and petroleum based hydraulic oils. However, to ensure proper performance, it is recommended systems be drained and flushed prior to installing AMSOIL BHO.

### **PERFORMANCE FEATURES**

- Vickers M-2950-S, I-286-S
- 95% Biodegradable (CEC L-33-T-93)
- Low Aquatic Toxicity
- Thermally and Hydrolytically Stable
- Resists Oxidation
- Outstanding Wear Protection
- Anti-Rust and Anti-Foam Protection



## **TYPICAL TECHNICAL PROPERTIES**

### **Biodegradable Hydraulic Oil (BHO)**

ISO VG — ASTM D-2422	46
Viscometrics 100°C, cSt — ASTM D-445	9.6
Viscometrics 40°C, cSt — ASTM D-445	45.9
Viscosity Index (VI) — ASTM D-2270	200
Specific Gravity	0.938
Density	7.81
Four-Ball Wear Test — ASTM D-4172 (40 kg, 1200 rpm, 75°C, 60 min.), Scar; mm	0.36
FZG Failure Load Stage — ASTM D-5182	12
Flash Point °C (°F) — ASTM D-92	232 (450)
Pour Point °C (°F) — ASTM D-97	-33 (-27)
Copper Strip Corrosion Test — ASTM D-130	1A
Rust Procedure ASTM D-665	
A — distilled water	PASS
B — salt water	PASS
Foam ASTM D-892	
Sequence I	0/0
Sequence II	10/0
Sequence III	0/0
Demulsibility ASTM D-1401	
Oil/Water/Cuff (minutes)	40/40/0 (10)
Modified Sturm, OECD 301B	Readily Biodegradable (Pw1)
Biodegradability % — CEC L-33-T-93	95%
Fathead minnow, 96h, LC50, ppm	>10000 ppm
Daphnia magna, 48h, EC50, ppm	>10000 WAF
Cleanliness ISO 4406	17/15/12
(FSRIA) Criteria	PASS

### **AMSOIL PRODUCT WARRANTY**

AMSOIL Industrial Lubricants are formulated to exceed accepted industry specifications. AMSOIL warrants that the use of its lubricants will not cause mechanical damage to any mechanically-sound equipment when AMSOIL products are used in full compliance with the company's recommendations. However, the purchaser is responsible for determining if these specifications are adequate and proper for the intended application. The AMSOIL warranty is limited to lubricant performance consistent with indicated specifications. No additional warranty, expressed or implied, can be made. For additional warranty information visit [www.amsoil.com](http://www.amsoil.com).

### **AMSOIL PRODUCT AVAILABILITY**

AMSOIL products are available in 5-gallon pails, 55-gallon drums, 275-gallon totes and bulk quantities.

AMSOIL Industrial Lubricants are stocked in Superior, Wisconsin and in select regional distribution centers throughout the United States and Canada. AMSOIL will stock additional quantities of lubricants or special-order products based on customer requests and regional demands. For applications and recommendations, contact your local AMSOIL Dealer or the AMSOIL Technical Services Department.

*AMSOIL products and Dealership information are available from your local AMSOIL Dealer.*

