



Base Oil Technology: SYNTHETIC

Data Sheet

AMSOIL Industrial Synthetic Biodegradable Hydraulic Oil is formulated with synthetic esters to provide excellent protection against wear, corrosion and foam. It is engineered for use in mobile and stationary applications where high biodegradability is required.

Product Benefits

- Readily biodegradable, ashless, non-zinc formula helps reduce environmental harm in the event of leaks or minor spills.
- Protects against pump and motor wear for maximum component life and reduced maintenance.
- Guards against rust and corrosion to help keep components clean and long-lasting.
- Excellent foam control reduces sponginess and promotes reliable, responsive operation.
- Compatible with common seal materials to reduce leaks and maximize seal life.

Excellent Wear Protection

This oil uses premium synthetic ester base oils and high-quality additives to protect hydraulic pumps and motors against wear in the toughest operating conditions. It forms a resilient lubricating film on critical parts that withstands stress and increased heat, protecting components and maximizing system life.

Reduces Environmental Impact

AMSOIL Industrial Synthetic Biodegradable Hydraulic Oil provides a high level of biodegradability, which reduces harm in the event of leaks or minor spills. It delivers the ideal combination of excellent protection for equipment and the environment.

Resists Oxidation

High-quality oxidation inhibitors resist oxidation in the presence of elevated heat to reduce harmful deposits and promote long oil life. This oil offers peace of mind that hydraulic systems are protected in severe service, helping reduce maintenance.

Applications

Use AMSOIL Industrial Synthetic Biodegradable Hydraulic Oil in stationary and mobile applications using gear, vane and piston hydraulic systems operating under high pressures and temperatures. Typical applications include (not limited to) construction, logging and farming equipment; lawn and turf care; sea- and freshwater ports; or anywhere leaks, spills or ruptured hydraulic lines may present an environmental hazard. Use in applications that require any of the following specifications:

Specifications*	ISO 46
Pw1 Ultimate Biodegradability (ASTM D5864)	✓
OECD 301B Readily Biodegradable	✓
Vessel General Permit (VGM) Compliant	✓
EN 16807: European Standard	✓
DIN 51524 Part 2&3	✓
ISO 15380 HEES	✓
Swedish Standard 15 54 34:2020	✓
USDA Bio-Preferred	✓

Elastomer Compatibility**		
COMPATIBLE	NON-COMPATIBLE	
Buna N, Nitrile Butadiene, nitrile content >25% (NBR)	EPDM (Ethylene propylene rubber) (EPR)	
Fluoroelastomers, Viton (FKM2)	Butyl (Isobutylene Isoprene) (IIR)	
Hydrogenated nitrile (HNBR)	Neoprene (Polychloroprene) (NP)	
Polyurethane (AU)		
Polytetrafluoroethylene, Teflon (PTFE)		

Typical Technical Properties** AMSOIL Industrial Synthetic Biodegradable Hydraulic Oil			
Stock Code		BH46AA	
ISO Viscosity Grade	ASTM D2422	46	
Kinematic Viscosity @ 100°C, cSt	ASTM D445	9.7	
Kinematic Viscosity @ 40°C, cSt	ASTM D445	47.5	
Brookfield viscosity @ -30°C, cP	ASTM D2983	4,300	
Viscosity Index	ASTM D2270	195	
Color		L1.0	
Flash Point °C (°F) (COC)	ASTM D92	302 (>576)	
Pour Point °C (°F)	ASTM D97	-43 (-45)	
Four-Ball Wear Test, mm (75°C, 1200 rpm, 40 kg, 1hr)	ASTM D4172	0.48	
Copper Corrosion 100°C, 3 hr	ASTM D130	1A	
Foam Tendency, ml	ASTM D892		
Seq 1		0/0	
Seq II		0/0	
Seq III		0/0	
Demulsibility	ASTM D1401	40-40-0 (15)	
Rust Procedure A (distilled water)	ASTM D665A	Pass	
Rust Procedure B (salt water)	ASTM D665B	Pass	
FZG Failure Load Stage	ASTM D5182	12	
Vane Pump Test	ASTM D7043	Pass	
Filtration Dry	ISO 13557-2	Pass	
Filtration Wet	ISO 13557-1	Pass	
Conversion to CO ² in 28 days	OECD 301B	>75% Readily Biodegradable	

Package Sizes

- 5-gallon pail
- 55-gallon drum

Health & Safety Information

For recommendations on safe handling and use of these products, refer to the Safety Data Sheet (SDS), which is available at AMSOILIndustrial.com or upon request through the AMSOIL Industrial Group at IndustrialSalesGroup@amsoil.com or (715) 399-6305.

^{*}All trademarked names and images are the property of their respective owners and may be registered marks in some countries. No affiliation or endorsement claim, express or implied, is made by their use.

^{**}The typical properties listed above reflect the general characteristics of the product and are not manufacturing specifications. Variations that do not affect product performance should be expected. Product formulations are subject to change without notice. The customer or user is responsible for determining the product's suitability for use with their equipment. **BH46AA is not available in the state of California**.