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DATA SHEET

PROTECTION *you demand.* | PERFORMANCE *you deserve.™*

Synthetic AW Series Anti-Wear Hydraulic Oil

Ultra-High VI for Extreme-Temperature Operation

Not all hydraulic oils can cut it when the temperature plunges far below zero. We formulated AMSOIL Synthetic AW Series Anti-Wear Hydraulic Oil to flow quickly in bitter cold to help prevent pressure spikes, erratic operation and ruptured hoses and seals. Since ambient temperatures can fluctuate wildly, we also formulated the oil to resist oxidation in the presence of high heat for the best of both worlds. It's the perfect choice for maximizing the life and reliability of severe-service mobile and stationary hydraulic systems.



- **Anti-wear** protection for high-pressure systems
- **Stays** fluid in extreme cold
- **Maintains** cleanliness
- **Promotes** maximum fluid life
- **Ultra-high** viscosity index

Excellent Cold-Weather Performance

AMSOIL Synthetic AW Series Anti-Wear Hydraulic Oil doesn't contain the waxes inherent to conventional oils that thicken in cold weather. It stays fluid in sub-zero temperatures for nearly immediate flow at startup. As a result, pumps, bearings, valves and other components receive vital lubrication at startup for long life. Reliable fluid flow reduces instances of pressure spikes that can damage pumps and rupture hoses and seals, helping reduce maintenance.

Maximum Cleanliness

AMSOIL Synthetic AW Series Anti-Wear Hydraulic Oil is formulated with naturally resilient base oils that resist chemical breakdown, helping keep hydraulic systems free of damaging varnish. It's fortified with a premium additive system that fights oxidation to help prevent acid formation. With AMSOIL Synthetic AW Series Oils, your hydraulic systems stay clean and deliver reliable, long-lasting performance.

Fights Damaging Heat

AMSOIL Synthetic AW Series Anti-Wear Hydraulic Oil contains potent anti-oxidant additives that resist the damaging effects of high heat. Its synthetic base oils maintain viscosity despite elevated heat to keep components protected against wear. The oil's ability to resist heat maximizes fluid life.

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TYPICAL TECHNICAL PROPERTIES

AMSOIL Synthetic AW Series Anti-Wear Hydraulic Oil

	AWG	AWH	AWI
ISO VG (ASTM D2422)	22	32	46
VK 100°C cSt (ASTM D445)	5.9	7.4	9.7
VK 40°C cSt (ASTM D445)	20.7	33.1	49.1
Viscosity Index (ASTM D2270)	256	200	188
SpGr - g/ml (ASTM D1298)	0.8363	0.8453	0.8463
Density - lb/gal (ASTM D1298)	6.964	7.038	7.047
Flash Point °C (°F) (ASTM D92)	174 (345)	228 (442)	230 (446)
Fire Point °C (°F) (ASTM D92)	188 (370)	248 (478)	250 (482)
Pour Point °C (°F) (ASTM D97)	<-60 (<-76)	-51 (-60)	-46 (-51)
Four-Ball Wear Test (ASTM D4172)			
(40 kg, 1200 rpm, 75°C, 60 min.)	0.45	0.45	0.45
Copper Strip Corrosion Test (ASTM D130)	1A	1A	1A
Foam (ASTM D892)			
Sequence I, II, III Test End	0/0,0/0,0/0	0/0,0/0,0/0	0/0,0/0,0/0
Dielectric Strength (ASTM D877)			
Voltage, kV AC	43.6	46.2	45.4
Demulsibility (ASTM D1401)			
Oil/Water/Cuff (min)	40/40/0 (10)	40/40/0 (10)	40/40/0 (10)
Rust Test (ASTM D665 A & B)			
Fresh Water and Synthetic Sea Water	Pass	Pass	Pass

AMSOIL PRODUCT WARRANTY

AMSOIL products are backed by a Limited Liability Warranty. For complete information visit AMSOIL.com/warranty.

HEALTH AND SAFETY

This product is not expected to cause health concerns when used for the intended applications and according to the recommendations in the Safety Data Sheet (SDS). An SDS is available online at AMSOIL.com or upon request at (715) 392-7101.
Keep Out of Reach of Children.

APPLICATIONS*

Use the correct viscosity of AMSOIL Synthetic AW Series Anti-Wear Hydraulic Oil in high- and low-pressure gear, vane and piston stationary and mobile hydraulic systems that require any of the specifications listed to the right. Excellent for general-purpose use where extended drain intervals are desired and in severe-duty operation where temperature extremes are encountered.

AMSOIL AW Series Oil is compatible with hydraulic system seals, petroleum hydraulic oils and most synthetic hydraulic oils (**not compatible** with phosphate-ester, silicone or water-based fluids). For optimum performance, it is recommended the system be thoroughly drained and, if warranted, cleaned prior to installation. Oil analysis is recommended to maximize oil drain intervals.

Product Code	AWG	AWH	AWI
Denison HF-0, HF-1, HF-2		x	x
Vickers M-2950-S and I-286-S		x	x
Cincinnati Milacron P-68		x	
Cincinnati Milacron P-70			x
U.S. Steel 127, 136		x	x
Racine, variable volume vane pumps		x	x
DIN 51524, Part 2		x	x
AFNOR E 48-603 (except for PM-500 series silver-containing pumps, which require R&O additive systems)		x	x
Ford M6C-32		x	x
GM LH-04-1, LH-06-1 and LH-15-1		x	x
Lee Norse 100-1		x	x
Jeffrey No. 87		x	x
BF Goodrich 0152		x	x
Commercial Hydraulics (except for PM-500 series silver-containing pumps, which require R&O additive systems)		x	x

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