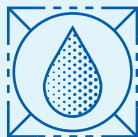




CITGO® HyDurance® AW Synthetic Fluids

OVERVIEW



- Premium ashless hydraulic fluids formulated with the highest quality synthetic base stocks and additives.
- Outstanding chemical stability, anti-wear protection and resistance to sludge formation.

FEATURES & BENEFITS

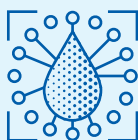


- Excellent low- and high-temperature performance provides a higher margin of equipment protection, beyond the capabilities of comparable mineral oils.
- The combination of synthetic base stocks and an ashless additive package provides a product with exceptional oxidation stability, allowing for extended drain and filter change intervals.
- High resistance to sludge formation helps assure clean and trouble-free operation.
- Excellent thermal and oxidative stability reduces system deposits, resulting in longer fluid life.
- High viscosity index and low pour point allow for operation over a wide temperature range without the viscosity loss problems typical of multi-grade mineral oils.
- Excellent corrosion protection.
- Exceptional demulsibility allows for the separation of large amounts of water from the system.
- Exceptional anti-wear properties.



CITGO HyDurance AW
46 Synthetic Fluid

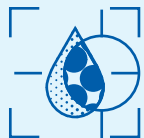
APPLICATIONS



- Designed for use in vane, piston, and gear pumps typically found in hydraulic and circulating systems, and to provide excellent service life to pumps, servos and motors.
- Meet or exceed the following manufacturer specifications:
Eaton E-FDGN-TB002-E
Parker Denison HF-0
Fives Cincinnati P-70 (ISO 46), P-69 (ISO 68)
U.S. Steel 127, 136

- **FULLY SYNTHETIC**
- **EXTREME TEMPERATURE PERFORMANCE**

PROPERTIES



Typical Properties for CITGO HyDurance AW Synthetic Fluids:

Grade	46	68
Material Code	633602001	633603001
Specific Gravity, 60°/60°F	0.8498	0.8540
Density, lbs/gal	7.08	7.11
Viscosity, ASTM D445		
cSt at 40°C	43.4	67.0
cSt at 100°C	7.29	10.08
Viscosity Index, ASTM D2270	131	135
Flash Point, COC, ASTM D92, °C (°F)	266 (510)	268 (514)
Pour Point, ASTM D97, °C (°F)	-60 (-76)	-57 (-70)
Color, ASTM D1500	1.0	1.0
Brookfield Viscosity, ASTM D2983		
cP at -18°C	1500	2865
cP at -26°C	3340	—
Water Separability at 54°C, ASTM D1401	40-40-0	40-40-0
Four Ball Wear, ASTM D4172, 40kg, mm	0.60	0.58
Copper Corrosion, ASTM D130	1B	1B
Rust Test, ASTM D665, A and B	Pass	Pass
Foam Sequence, ASTM D892, I, II, III	Pass	Pass

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