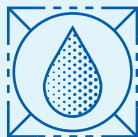




# CITGO® HyDurance® AW Synthetic Fluids

## 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

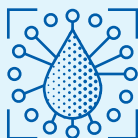


- Excellent low- and high-temperature performance provides a higher margin of equipment protection, beyond the capabilities of comparable mineral oils.
- The combination of synthetic base stocks and an ashless additive package provides a product with exceptional oxidation stability, allowing for extended 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

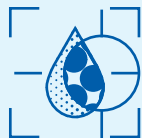
## APPLICATIONS



- 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 Brochure 03-401-2010 (formerly Vickers I-286-S, M-2950-S)  
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, 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 cP at -18°C	1500	2865
cP at -26°C	3340	—
Water Separation, ASTM D1401, at 130°F (54°C)	40/40/0 (5)	40/40/0 (5)
Four Ball Wear, ASTM D4172, 40kg, mm	0.60	0.58
Copper Corrosion, ASTM D130	1B	1B
Rust Protection, ASTM D665		
DI Water	Pass	Pass
Salt Water	Pass	Pass
Foam Sequence, ASTM D892, I, II, III	Pass	Pass

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