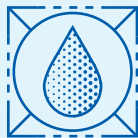




CITGO® HyDurance® AW Super NZ Fluids

OVERVIEW



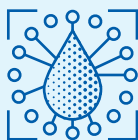
- High-efficiency hydraulic fluids for use over a wide temperature use range.
- Formulated with premium base stocks and ashless additives to provide long fluid life and outstanding protection for demanding mobile equipment hydraulic systems.
- Formulated with premium Zinc-free additive system. Zinc compounds are regulated as priority pollutants under provisions of the Clean Water Act and SARA Title 313.

FEATURES & BENEFITS



- Helps increase pump efficiency for improved productivity.
- Zinc-free and low acute aquatic toxicity (as shown by LC-50 test), for less environmental impact.
- Multi-grade performance for use over a wide temperature range.
- Excellent shear stability and thermal stability for extended fluid service life capability.
- Separates readily from water to allow draining of water from systems.
- Premium protection against rust and corrosion for harsh environments.
- Excellent foam control for dependable performance.
- Provides outstanding anti-wear protection to pumps, motors, and other hydraulic circuit components.
- Recommended for use in Hitachi excavators with 4,000 hour service intervals*.

APPLICATIONS



- Designed for increased hydraulic efficiency and excellent service life in vane, piston, and gear pumps, when used in accordance with equipment manufacturer recommendations.
- Highly recommended for high-pressure mobile equipment hydraulic systems operating in wide temperature range applications such as mining, construction, and logging.
- Recommended for equipment requiring the following specifications:
 GM LS-02
 Eaton E-EDGN-TB002-E
 DIN 51524 PART 3
 U.S. Steel 127, 136, 126
 Cincinnati Machine P-68, P-69, P-70
 Parker Denison HF-0
 Hitachi Excavators*

*Applicable to CITGO HyDurance AW Super NZ Fluid only

PROPERTIES



Typical Properties for CITGO HyDurance AW Super NZ Fluids

	Super NZ 32	Super NZ
Material Code	633619001	633618001
Gravity, ASTM D4052, °API	33.4	31.5
Density, lb/gal	7.15	7.23
Flash Point, PM, ASTM D93, °F (°C)	410 (210)	385 (196)
Viscosity, ASTM D445		
cSt at 40°C	32.1	53.0
cSt at 100°C	6.6	9.9
Viscosity Index, ASTM D2270	170	177
Brookfield Viscosity, ASTM D2983		
cP at -20°C	1116	
cP at -30°C	3,450	7,998
cP at -40°C	16,890	36,392
Pour Point, ASTM D97, °F (°C)	-54 (-48)	-49 (-45)
Color	Blue	Blue
Copper Corrosion, ASTM D130	1A	1A
Rust Test, ASTM D665, A and B	Pass	Pass
Four Ball Wear, ASTM D4172, at 40 kg, mm	0.54	0.50
Foam Test, ASTM D892, Sequence I, II, III	Pass	Pass
Water Separability at 54°C, ASTM D1401	40-40-0	40-40-0
Acute aquatic toxicity (LC-50) per OECD TG 203	Pass	Pass

Notes: Contamination with other fluids can affect environmental benefits and system performance. Contamination with zinc containing and/or emulsifiable fluids may cause foaming, premature filter saturation, and a decrease in water separability. Refer to equipment owner's manual for proper lubricant selection.

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