



Clear Blue Ashless AW Hydraulic Oil

Bel-Ray® Clear Blue Ashless AW Hydraulic Oils are special hydraulic fluids formulated from highly-refined base stocks and proprietary zinc-free additive technology to offer ultimate protection of operating equipment and the environment. The zinc-free (ashless, no ZDDP in composition) additive formulation was developed for service applications within environmentally sensitive areas such as parks, bodies of water, recreational areas, amusement parks, ski resorts, in-ground lifts and equipment operating in populated areas. Bel-Ray Clear Blue Ashless AW Hydraulic Oils are non-toxic to sea life and non-hazardous to surrounding inhabitants in case of an accidental leak, release or spill. Bel-Ray Clear Blue Ashless AW Hydraulic Oil exceeds ASTM D5864 standards for classification as Inherently Biodegradable. It also meets requirements for U.S. EPA 40 CFR Static Sheen Test (water sheen or slick) in ambient seawater and EPA LC50 Saltwater Test (Shrimp Kill).

EQUIPMENT BENEFITS

- Optimum wear protection for hydraulic pumps and motors
- Exceptional oxidation, rust, corrosion and foam resistance
- Safe for use in applications containing yellow metal gear components
- Meets Static Sheen requirements (EPA 40 CFR)
- Meets EPA LC50 Saltwater Standards
- Inherently biodegradable (ASTM D5864 Standards)

PRODUCT FEATURES

- Dyed BLUE to differentiate from non-environmentally friendly fluids
- Provides optimum service life through 6,000+ hour oxidation stability performance (ASTM D-943)
- Offers superior performance when compared to vegetable based fluids
- Very cost-effective when compared to synthetic based environmental fluids
- Fully compatible with hydraulic oils that contain zinc; however mixing will mitigate environmental benefits

APPLICATIONS

- Recommended for sensitive, high-flow, high-pressure and heavy-load hydraulic and circulating systems requiring:
- Parker Hannifin (Denison) HF-O
 - Eaton Vickers 35VQ25A Pump, M-2950-S, & I-286-S3
 - Fives Cincinnati P-68, P-69, & P-70
 - AIST 126, 127, & 136
 - DIN 51524, Part 2 (HLP)
 - ISO 11158 (previously AFNOR E48-603), 48-690 (Dry), 48-691 (wet filtration tests)
 - ISO VG 46 meets specs for Hitachi Genuine Hydraulic Oil Super EX 46 HN

Clear Blue Ashless AW Hydraulic Oil
Typical Physical Properties

Property	Test Method	32	46	68
Density@15°C, g/cm ³	ASTM D4052	0.8624	0.8671	0.8708
API GRAVITY @ 60 F	ASTM D4052	32.5	31.6	30.9
Viscosity @ 40°C, cSt	ASTM D445	32	46	68
Viscosity @ 100°C, cSt	ASTM D445	5.5	6.4	8.7
Viscosity Index	ASTM D2270	107	83	99
Flash Point, °C (°F)	ASTM D93	202 (396)	201 (410)	220 (428)
Pour Point, °C (°F)	ASTM D97	-18 (-0.4)	-15 (5)	-15 (5)
Zinc, wt%	ASTM D6481	0.003	0.003	0.003
Pounds per Gallon	ASTM D1250	7.184	7.224	7.255

Minor variations in typical physical properties may occur from normal manufacturing processes

DISTRIBUTED BY:

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