



Ultra Hydraulic AW Oils

Premium Anti-Wear Hydraulic Oils

Ultra Hydraulic AW Oils are premium performance, long life, and anti-wear hydraulic oils, designed for use in heavy-duty hydraulic systems. These oils give excellent results in a wide range of high-pressure hydraulic systems found in industrial machinery and mobile equipment used in marine, woodlands, construction and mining operations.

Applications

Hydraulic Systems - Ultra Hydraulic AW Oils are recommended for use in high-pressure hydraulic systems, which operate above 7,000 kPa (1,000 psi), under severe conditions. They provide an outstanding combination of characteristics that protect systems against wear, rust, and corrosion. They are designed to provide excellent system oil life without excessive deterioration due to oxidation. These oils also provide superior demulsibility, air separation, anti-foam properties, hydrolytic stability, thermal stability, and filterability qualities. They are not recommended for use in pumps utilizing silver plated components.

Circulating Systems - Ultra Hydraulic AW Oils can also be used in circulating systems where rust and oxidation inhibited oils are desirable. They will provide excellent lubrication for bearings and gears operating under normal loads where extreme pressure capabilities are not required.

Machine Spindles - Ultra Hydraulic AW 10 is a low viscosity, rust and oxidation inhibited oil designed specifically for high speed textile and machine tool spindle applications where anti-wear characteristics are not required.

Ultra Hydraulic AW 32, 46, & 68 Oils are approved by the Canadian Food Inspection Agency (CFIA) for use in registered plants and food processing establishments where no contact may occur. They are listed as Category N2 (Hydraulic) lubricants. They meet the requirements of the U.S. Department of

Agriculture (USDA) as H2 lubricant for use in federally inspected meat and poultry plants where no food contact may occur.

Performance Benefits

Anti-Wear Protection¹ - Ultra Hydraulic AW Oils provide superior lubrication and wear protection for improved equipment reliability and longer pump life in all piston, gear, and vane hydraulic pumps operating over a wide range of pressures.

Oxidation Stability - Advanced additive technology promotes longer oil life by reducing and eliminating the formation of harmful sludge and varnish. This ensures smooth and reliable operation of hydraulic valves and actuators, thus reducing operating and maintenance costs.

Filterability - Ultra Hydraulic AW Oils have been designed to remain clean and filterable, even with water present, ensuring long filter service life and reduced incidence for fouling of servo valves. When **Ultra Hydraulic AW** oils are used in systems equipped with super filtration, down to 3 microns, there is no loss or removal of performance additives.

Hydrolytic Stability - Advanced additive technology resists degradation in contact with water. Bronze and brass components are protected against potential corrosion.

Heat Stability - Thermally stable components that resist decomposition and formation of sludge at elevated temperatures.

Anti-Rust Protection - Additive technology ensures rust free operation even in the presence of salt water.

Water Separation - Excellent water separation properties are maintained to allow rapid drain off of water.

Manufacturers Tests and Approvals

Denison HF-O, HF-2	Approved
Denison T6C Vane Pump (Wet & Dry Phases)	Pass
Denison P46 Piston Pump	Pass
Eaton Vickers M-2952-S, M-2950-S, I-286-S	Meets
Eaton Vickers 35VQ25	Pass
Eaton Vickers 104C	Pass
Cincinnati Machine P-68, P-69, P-70	Approved
DIN 51524 Part II	Meets

Typical Properties

Properties	Hydraulik AW						
	10	22	32	46	68	100	150
ISO Viscosity Grade	10	22	32	46	68	100	150
Operating Temperature Range, °C	-12/50	-12/60	-10/60	-5/70	0/80	5/90	10/100
Density @ 15 °C, kg/l	.8888	.8644	.8680	.8711	.8743	.8816	.8827
Viscosity							
cSt @ 40 °C	9.7	21.6	32.2	46.3	68.2	96.7	146.8
cSt @ 100 °C	2.4	4.3	5.6	6.9	8.9	11.0	14.6
Viscosity Index	34	99	108	106	103	100	97
Flash Point °C	152	208	212	220	236	254	286
Pour Point, °C	-57	-36	-33	-30	-27	-27	-21
Rust Test A & B, 48 Hrs	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Copper Corrosion, 3 Hrs	1a	1a	1a	1a	1a	1a	1a
Demulsibility	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Colour	1.0	1.0	1.0	1.0	2.0	2.0	2.0
AGMA R & O #	N/A	N/A	N/A	1	2	3	4

The values quoted above are typical of normal production and they do not constitute a specification.

Product Availability

Package	Hydraulik AW						
	10	22	32	46	68	100	150
Bulk			•	•	•	•	
205-L Drum	•	•	•	•	•	•	•
20-L Pail	•	•	•	•	•	•	•

Due to continuing product research and development, the information contained herein is subject to change without notification

¹ Hydraulik AW 10 formulation contains no anti-wear additive.