



AW HYDRAULIC OIL

Sinclair AW Hydraulic Oils are premium quality, high viscosity index (VI), anti-wear hydraulic oils. These oils are specifically formulated to lubricate and protect today's hydraulic systems operating at high pressures and temperatures and with close tolerances. They also offer excellent water separation properties, rust protection, and antifoam protection. Sinclair AW Hydraulic oils have been tested and approved by major pump manufacturers and are used in both mobile and industrial equipment. They specifically meet the requirements of the following major pump manufacturers: Denison, Vickers, and Rexnor (Racine). They also meet Cincinnati Milacron specifications for AW hydraulic oils.



APPLICATIONS

Sinclair AW Hydraulic oils are primarily intended for use in hydraulic systems, especially those designed with close tolerances, operating where extremes of pressure, temperature, and pump speed are encountered. These oils have been tested and approved as meeting the requirements of pump manufacturers such as Denison (HF-0), Rexnord (Racine), and Vickers, for anti-wear hydraulic fluids. They also meet Cincinnati Milacron specifications P-68, P-69, and P-70 for AW hydraulic oils.

IMPORTANT CHARACTERISTICS

Sinclair AW Hydraulic oils are compounded from premium, high VI Group II paraffinic-base oils plus a thermally stable additive package that affords improved pump performance while maintaining system protection. Performance properties:

- Anti-wear Protection for a wide range of hydraulic pumps and components used under severe operating conditions.
- Rust and Corrosion Protection to satisfy the ASTM Salt Water Rust and Copper Strip Corrosion tests.
- Excellent Demulsibility or water separation qualities.
- Filterability meets Denison requirements.
- Foam Control.
- Good low temperature properties.

SELECTION GUIDE

Sinclair AW Hydraulic oils are available in five viscosity grades to satisfy all major hydraulic applications for anti-wear oils. These oils are formulated to the following ISO viscosity grades: 32, 46, 68, 100 and 150. Selection optimum grade for a specific application should be consistent with the equipment manufacturer's recommendations.

BENEFITS

- Longer pump life due to outstanding wear protection in a wide variety of in-plant and mobile equipment.
- Longer production runs because of rust and oxidation prevention.
- Reduced inventory since one product is satisfactory for equipment from many different manufacturers.
- Reduced downtime due to their good water separation.
- Reduced maintenance costs due to superior protection and lubrication.



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TYPICAL PHYSICAL PROPERTIES

Viscosity Grade	METHOD	TYPICAL RESULTS				
		ISO 22	ISO 32	ISO 46	ISO 68	ISO 100
Gravity, °API	ASTM D287	33.5	32.44	31.46	30.71	30.12
Specific Gravity @ 60°F (15.6°C)	ASTM D4052	0.8576	0.8631	0.8683	0.8723	0.8755
Viscosity @ 40°C cSt	ASTM D445	21.82	32.11	46.03	69.25	99.86
Viscosity @ 100°C cSt	ASTM D445	4.36	5.55	6.95	8.95	11.31
Viscosity Index	ASTM D2270	107	110	105	103	99
Oxidation Hours	ASTM D943	5000	5000	5000	5000	5000
Color	ASTM D1500	0.5	0.5	0.5	0.5	0.5
Zinc, wt. %	ASTM D5185	0.041	0.041	0.041	0.041	0.041
Phosphorus, wt. %	ASTM D5185	0.033	0.033	0.033	0.033	0.033
Calcium, wt. %	ASTM D5185	0.003	0.003	0.003	0.003	0.003
Sulfur, wt. %	ASTM D4951	0.065	0.065	0.065	0.065	0.065

Description	Pack Size	Part #	Each UPC	Case UPC	Case Dimensions	Case Cube / Pallet Cube	Case Weight / Pallet Weight	Pallet Stack
AW Hydraulic Fluid ISO 22	55 Gallon	539-003	0 14168-01748 0	N/A	L 23.000 x W 23.000 x H 35.000	10.715 / 44.444	408.203 / 1632.970	4 Drums
AW Hydraulic Fluid ISO 32	5 Gallon	540-008	0 14168-01632 2	N/A	L 12.500 x W 12.500 x H 15.500	1.402 / 60.083	40.215 / 1689.034	42 Eaches (3 layers of 14)
AW Hydraulic Fluid ISO 32	55 Gallon	540-003	0 14168-01693 3	N/A	L 23.000 x W 23.000 x H 35.000	10.715 / 44.444	428.491 / 1713.962	4 Drums
AW Hydraulic Fluid ISO 32	330 Gallon	540-002	N/A	N/A	L 48.000 x W 48.000 x H 49.000	65.333 / 72.000	2,535.340 / 2535.340	1 Tote
AW Hydraulic Fluid ISO 46	5 Gallon	541-008	0 14168-01633 9	N/A	L 12.500 x W 12.500 x H 15.500	1.402 / 60.083	40.444 / 1698.653	42 Eaches (3 layers of 14)
AW Hydraulic Fluid ISO 46	55 Gallon	541-003	0 14168-01694 0	N/A	L 23.000 x W 23.000 x H 35.000	10.715 / 44.444	427.260 / 1709.039	4 Drums
AW Hydraulic Fluid ISO 46	330 Gallon	541-002	N/A	N/A	L 48.000 x W 48.000 x H 49.000	65.333 / 65.333	2,546.230 / 2546.230	1 Tote
AW Hydraulic Fluid ISO 68	5 Gallon	542-008	0 14168-01634 6	N/A	L 12.500 x W 12.500 x H 15.500	1.402 / 60.083	40.573 / 1704.075	42 Eaches (3 layers of 14)
AW Hydraulic Fluid ISO 68	55 Gallon	542-003	0 14168-01695 7	N/A	L 23.000 x W 23.000 x H 35.000	10.715 / 44.444	429.367 / 1717.468	4 Drums
AW Hydraulic Fluid ISO 68	330 Gallon	542-002	N/A	N/A	L 48.000 x W 48.000 x H 49.000	65.333 / 65.333	2,557.450 / 2557.450	1 Tote
AW Hydraulic Fluid ISO 100	5 Gallon	544-008	0 14168-01635 3	N/A	L 12.500 x W 12.500 x H 15.500	1.402 / 60.083	40.877 / 1716.842	42 Eaches (3 layers of 14)
AW Hydraulic Fluid ISO 100	55 Gallon	544-003	0 14168-01696 4	N/A	L 23.000 x W 23.000 x H 35.000	10.715 / 44.444	432.024 / 1728.095	4 Drums
AW Hydraulic Fluid ISO 100	330 Gallon	544-002	N/A	N/A	L 48.000 x W 40.000 x H 45.000	50.000 / 50.000	2,525.490 / 2525.490	42 Eaches (3 layers of 14)

