Product Information

A PRODUCT OF VALVOLINE, A DIVISION OF ASHLAND INC.

Valvoline® AW Hydraulic Oils

Valvoline AW (Anti-Wear) Hydraulic Oils are formulated for use in hydraulic systems employing high performance pumps. They are non-detergent oils with excellent oxidation and demulsibility characteristics and contain rust and foam inhibitors. Valvoline AW Hydraulic Oils maintain a typical viscosity index of 95 throughout the line. They incorporate highly effective zinc antiwear chemistry with premium basestocks. All have passed the Rust Test ASTM D-665 Procedure A&B.

The excellent demulsibility of Valvoline AW Hydraulic Oils proves highly useful in mobile equipment applications. Other suitable applications (of proper grades) include lubrication of machine tools, servo controls, metalworking equipment, as light duty crankcase oils, circulating systems, bearings/journal (anti friction) and gear cases.

Do not use in ammonia compressors, as heat transfer oils, with silver bearings or at prolonged temperatures above 200º F.

Approvals	**Viscosity Grade/Other**						
Cincinnati Milacron P-68	AW32						
Cincinnati Milacron P-70		AW46					
Cincinnati Milacron P-69			AW68				
Sperry Vickers I-286-S & M2950-S	AW32	AW46	AW68	AW100	AW150	AW220	AW320
Denison HF-1/HF-2/HF-0	AW32	AW46	AW68	AW100	AW150	AW220	AW320
Racine variable volume vane pumps	AW32	AW46	AW68	AW100	AW150	AW220	AW320
Lee Norse 100-1	AW32	AW46	AW68	AW100	AW150	AW220	AW320
ASLE 150-215-315 AW	AW32	AW46	AW68	AW100	AW150	AW220	AW320
U.S. Steel 136/127	AW32	AW46	AW68	AW100	AW150	AW220	AW320
DIN 51524, Part 2	AW32	AW46	AW68	AW100	AW150	AW220	AW320
Jeffery 87	AW32	AW46	AW68	AW100	AW150	AW220	AW320
Ford M-6C32	AW32	AW46	AW68	AW100	AW150	AW220	AW320
B.F. Goodrich 0152	AW32	AW46	AW68	AW100	AW150	AW220	AW320
AFNOR E 48-603	AW32	AW46	AW68	AW100	AW150	AW220	AW320
General Motors LH-04-1, LH-06-1, LH-15-1	AW32	AW46	AW68	AW100	AW150	AW220	AW320
Joy Mining Machinery HO-T, HO-S, HO-T2.	AW32	AW46	AW68	AW100	AW150	AW220	AW320

Typical Properties	**AW32**	**AW46**	**AW68**	**AW100**	**AW150**	**AW220**	**AW320**
API Gravity @ 60° F	30.4	30.2	28.3	28.3	27.6	27.3	26.9
Viscosity @ 40° C cSt	32.5	46.0	69.8	100	143.3	208	320
Viscosity @ 100° C cSt	5.2	6.6	8.3	11.2	14.3	18.4	24.0
Color	1.5	1.5	2.0	5.0	7.0	7.0	8.0
Pour Point °F	-25	-20	-10	-5	-5	0	+5
Flash Point - COC °F	390	400	480	490	510	500	252
Fire Point - COC °F	440	450	515	530	540	535	570
Oxidation Test ASTM D-943 to a 2.0 Neut., No. Hrs.	2500	2500	2500	2000	1500	1000	1000

Typical Properties							
Bulk	VV0400	VV0420	VV0440	VV702060	VV702160	VV702260	VV702180
55 Gallon Drum	VV040	VV042	VV044				
5 Gallon Pail	VV041	VV043	VV045				

In a clean, dry condition, this oil will typically exceed 30 kv when tested by ASTM D-877 Dielectric Breakdown Voltage of Insulating Liquids.

Refer to Valvoline Inc.'s Material Safety Data Sheet for health and safety information.

This information only applies to products manufactured in the following location(s): USA, Canada.

Effective Date:	Expiration Date:	Replaces:	Author's Initials:	Code
10/10/2008	N/A	09/24/2007	JH	PI 0801