#### PRODUCT DATA SHEET Page 1 of 3

## KLONDIKE Multi-Viscosity AW Hydraulic Fluids: ISO 15, 22, 36, 46, 68



### **PRODUCT DESCRIPTION**

KLONDIKE Multi-Viscosity (MV) Anti-Wear (AW) Hydraulic Fluids are advanced, long life fluids designed for high performance hydraulic systems in mobile and stationary equipment. These premium fluids provide excellent operating and maintenance benefits across a broad temperature range for increased productivity, performance, and hydraulic pump protection.

### **APPLICATIONS**

KLONDIKE Multi-Viscosity Anti-Wear Hydraulic Fluids are recommended for vane, piston, or gear-type hydraulic pumps in heavy duty, industrial machinery and mobile equipment. These premium oils effectively replace single grade hydraulic oils in any application where a reliability and performance improvement is desired.

These hydraulic oils may also be used as general purpose lubricants where straight mineral oils or conventional rust and oxidation inhibited oils are recommended.

Check your owner's manual for recommended fluid viscosity.



## FEATURES AND BENEFITS

KLONDIKE MV Anti-Wear Hydraulic Fluids are manufactured with the highest quality, ultra-pure group 2 paraffinic base oils and high performance additives. These advanced base oils maximize hydraulic performance and provide long term, trouble free service in high output hydraulic systems operating at high temperature and pressure. Multi-viscosity hydraulic fluid is formulated with an effective viscosity index improver to offer high viscosity index characteristics. These advanced features ensure that these products deliver reliable and consistent performance over a broader temperature range than typical single grade hydraulic fluids, resulting in increased equipment productivity, less seasonal fluid changes, lower maintenance cost, and less equipment down time. KLONDIKE MV anti-wear hydraulic fluids have increased discharge flow rates and decreased internal pump leakage rates resulting in overall system efficiency, fewer fluid changes, and less used fluid disposal.

KLONDIKE MV Anti-Wear Hydraulic Fluids also contain KLONDIKE's advanced 'Arctic Performance Technology'. Ultra-low pour points and fluidity rivaling synthetic performance, ensures outstanding low temperature equipment startup and minimized wear in these extreme conditions.

KLONDIKE MV Anti-Wear Hydraulic Fluids deliver value through the following benefits:

- High viscosity index minimal viscosity change across wide temperature range delivers consistent, reliable performance.
- **High oxidation stability** resists heat induced oil thickening and deposit formation in high pressure, high temperature service applications.
- Outstanding anti-wear premium antiwear additives minimize metal to metal contact even in high pressure operation.
- Smooth operation excellent fluid stability and water separation characteristics promote filterability even in the presence of water contamination. Anti-foam and air release properties help ensure smooth operation and high system efficiency.
- Optimal oil service life high oxidation stability maximizes fluid life for reduced oil changes and improved fluid economy.

# **KLONDIKE Multi-Viscosity AW Hydraulic Fluids**

## SPECIFICATIONS AND APPROVALS

KLONDIKE Multi-Viscosity Anti-Wear Hydraulic Fluids are recommended for use in equipment manufactured by Eaton Vickers, Denison, Komatsu, Sauer-Danfoss, Oilgear, Hydreco, Dynex and others.

KLONDIKE Multi-Viscosity Anti-Wear Hydraulic Fluids meet the requirements of (but not limited to) the following specifications in the appropriate viscosity grade:

- Parker Hannifin (Denison) HF-0 (ISO 36, 46, 68)
- Eaton-Vickers 35VQ25A, I-286-S, M-2950-S (ISO 36, 46, 68)
- Bosch Rexroth RDE 90245 (ISO 36, 46, 68)
- Bosch Rexroth RE 07 075, RE 90 220 (ISO 36, 46, 68)
- Fives Cincinnati P-68 (ISO 36), P-69 (ISO 68) and P-70 (ISO 46)
- Arburg (ISO 46 wear requirements)

- JCMAS HK-1 (ISO 36, 46)
- ASTM D6158, HV (ISO 36, 46, 68)
- ISO 6743 Part 4, Type HV (ISO 15, 36, 46, 68)
- ISO 11158, HV (ISO 15, 36, 46, 68)
- DIN 51502, Type HVLP (ISO 15, 36, 46, 68)
- DIN 51524 Part 3, HVLP (ISO 15, 36, 46, 68)

TYPICAL TECHNICAL PROPERTIES							
DDODEDTV	TEST METHOD	KLONDIKE					
PROPERTY		MV 15	MV 22	MV 36	MV 46	MV 68	
Oxidation hours, min	ASTM D943	6000+	6000+	6000+	6000+	6000+	
Viscosity @ 40°C (cSt)	ASTM D445	15.2	22	36	46	68	
Viscosity @ 100°C (cSt)	ASTM D445	3.9	4.7	6.8	7.8	10.2	
Viscosity Index	ASTM D2270	145	140	150	148	145	
Flash Point °C	ASTM D92	220	225	225	220	220	
Pour Point °C	ASTM D5950	-60	-51	-48	-42	-38	
Zinc, wt %	ASTM D4927	0.03	0.03	0.03	0.03	0.04	
Gravity; °API	ASTM D4052	30.6	34.0	34.0	33.9	31.7	
Specific Gravity @ 60°F	ASTM D4052	0.850	0.852	0.852	0.85		
Operating temperature range °C		-50 - 130	-45 - 180	-40 - 190	-30 - 190	-28 -190	

All stated physical properties are typical of standard production and may vary.

## **KLONDIKE Multi-Viscosity AW Hydraulic Fluids**

## HEALTH AND SAFETY

This product is not expected to have adverse health implications when used for its intended application. For detailed information on safe handling of this product, refer to its Material Safety Data Sheet (MSDS). To obtain an MSDS on this or any other KLONDIKE product, please visit www.klondikelubricants.com or call 1-877-293-4691. When disposing of used product, be responsible to the environment.

PRODUCT NUMBERS					
MV AW 15	Pail: 18.9 L / 5 GAL	KL-HF4880			
	Drum: 208 L / 55 GAL	KL-HF4890			
	Tote: 1040 L / 275 GAL	KL-HF4895			
	Bulk	KL-HF4899			
MV AW 22	Pail: 18.9 L / 5 GAL	KL-HF5080			
	Drum: 208 L / 55 GAL	KL-HF5090			
	Tote: 1040 L / 275 GAL	KL-HF5095			
	Bulk	KL-HF5099			
MV AW 36	Pail: 18.9 L / 5 GAL	KL-HF5280			
	Drum: 208 L / 55 GAL	KL-HF5290			
	Tote: 1040 L / 275 GAL	KL-HF5295			
	Bulk	KL-HF5299			
MV AW 46	Pail: 18.9 L / 5 GAL	KL-HF5480			
	Drum: 208 L / 55 GAL	KL-HF5490			
	Tote: 1040 L / 275 GAL	KL-HF5495			
	Bulk	KL-HF5499			
MV AW 68	Pail: 18.9 L / 5 GAL	KL-HF5680			
	Drum: 208 L / 55 GAL	KL-HF5690			
	Tote: 1040 L / 275 GAL	KL-HF5695			
	Bulk	KL-HF5699			

## **BRAVING THE FORCE OF MOVEMENT**

KLONDIKE stands for robust, reliable, high quality products tailored to suit the requirements of the on- and off-road heavy duty, automotive and industrial markets. Our solutions span from trend-setting retail lubricants through small-batch custom formulations to large bulk orders ready for immediate delivery.

The extensive KLONDIKE product range includes premium oils, lubricants, greases, chemicals and specialty fluids formulated with virgin base oils and protective inhibitors. Designed to handle the most extreme climates and operating conditions, the KLONDIKE products protect and extend the life of your equipment, optimize performance and improve productivity while meeting and exceeding industry standards and specifications.

## KLONDIKE Lubricants Corporation

Toll-free 1-877-293-4691

info@klondikelubricants.com www.klondikelubricants.com