



# UNIVERSAL TRANSDRAULIC FLUID

## (Hydraulic Tractor Fluid)

Farm tractors are unique in that they often utilize the same fluid in the hydraulic system, transmission, wet brake system and differential. This flexibility, however, places great demands on the oil. For example, hydraulic systems require low viscosity oils with excellent flowability at low temperatures. At the other end of the spectrum, heavily loaded differential gears need oil with relatively high viscosity and excellent antiwear capacity. It is not easy for a single oil to satisfy the varied requirements of all these applications. **UNIVERSAL TRANSDRAULIC FLUID** not only satisfies all these requirements, it exceeds them.

**UNIVERSAL TRANSDRAULIC FLUID** is a special blend of selected paraffinic base oils and high performance additives. It has highly efficient wear prevention additives to protect heavily loaded transmission and differential gears. This serves to reduce wear and lengthen component life, even when equipment is operating at maximum capacity.

Another important feature of **UNIVERSAL TRANSDRAULIC FLUID** is its wide operating temperature range. During winter it remains fluid down to -40 F. This simplifies cold weather startup and reduces pump-damaging cavitation. Yet during hot summer operations **UNIVERSAL TRANSDRAULIC FLUID** remains viscous at high temperature.

Some tractor fluids lose viscosity while in service. This can increase wear and eventually cause equipment failure.

**UNIVERSAL TRANSDRAULIC FLUID** is highly shear stable. It maintains its viscosity throughout its usable life. In addition, oxidation inhibitors lengthen oil life and reduce sludge and varnish deposits. The result is oil that provides maximum wear protection for extended periods. This yields more production and fewer equipment failures.

**UNIVERSAL TRANSDRAULIC FLUID** is also available as a red or blue dyed product for select customers (see next page).

### BENEFITS:

- MEETS OR EXCEEDS MOST MANUFACTURERS' REQUIREMENTS FOR FARM AND INDUSTRIAL TRACTORS
- USE IN TRANSMISSIONS, DIFFERENTIALS, WET BRAKES AND HYDRAULIC SYSTEMS
- ALL SEASON OPERATION
- EXCELLENT WEAR PROTECTION
- PROVIDES SUPERIOR OXIDATION STABILITY FOR LONG SERVICE LIFE

### APPLICATIONS

**UNIVERSAL TRANSDRAULIC FLUID** is recommended for all types of farm and industrial tractors that call for a multifunctional oil. A list of the equipment manufacturers and their requirements is on the backside of this page.

**UNIVERSAL TRANSDRAULIC FLUID** is also recommended for equipment specifying Allison C-3, C-4 or Caterpillar TO-2 fluid.

This fluid meets Dennison HF-0, HF-1 and HF-2 credentials. It passes both Vickers 35VQ25 and M-2952-S pump tests and meets Vickers I-2986-S and M-2950 hydraulic requirements.



## Universal Transdraulic Fluid\* (Hydraulic Tractor Fluid)

### TYPICAL CHARACTERISTICS

Product Code	14100	14101	14102
API Gravity (ASTM D-1298)	28.3	28.3	28.3
Visual color	Amber	Blue	Red
Viscosity (ASTM D-445):			
cSt @ 40°C	62	62	62
cSt @ 100°C	9.5	9.5	9.5
SUS @ 100°F	318	318	318
SUS @ 210°F	58	58	58
Viscosity Index (ASTM D-2270)	140	140	140
Pour Point (ASTM D-97) °F (°C)	-40 (-40)	-40 (-40)	-40 (-40)
Flash Point (ASTM D-92) °F (°C)	395 (202)	395 (202)	395 (202)
Copper Corrosion (ASTM D 130)	1a	1a	1a
Recommended for tractor and other equipment calling for a universal hydraulic tractor fluid, torque converter fluid, wet-brake fluid, hydrostatic transmission fluid, or for off road equipment calling for a multifunctional oil. Meets the requirements of most equipment manufacturers listed below. (A list of manufacturer specifications requiring this fluid is shown on a separate page.)			
<u>Equipment manufacturers calling for this type of fluid include:</u> Allison, Case IH, Caterpillar, John Deere, Dresser, Fiat, Ford Heston, New Holland, Kubota, Massey-Ferguson, Mitsubishi, Renk, Steiger, White Farm, Versatile, Valmet and many others.			

The above data is subject to usual manufacturing variation. For more information and availability, call 1-800-442-LUBE.  
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**\*Universal Transdraulic Fluid** is intended for most hydraulic fluid and transmission oil applications for tractors and implements. Other names for this type of fluid are torque converter fluid, hydraulic tractor fluid, hydrostatic transmission fluid and power fluid. This fluid can often be used in the US where OEM genuine oil has a lower viscosity (ISO 46) than Universal Transdraulic (ISO 68), or where the genuine oil is zinc free. Lower viscosity tractor fluid is advantageous (and is recommended) where arctic conditions prevail.

**Universal Transdraulic Fluid** meets the following hydraulic system manufacturers requirements: Eaton, Denison, Vickers and Sauer-Sundstrand.



# Universal Transdraulic Fluid\*

<u>COMPANY</u>	<u>SPECIFICATION</u>	<u>COMPANY</u>	<u>SPECIFICATION</u>
AGCO	See Deutz-Allis	International Hough	See Dresser
Allis Chalmers	See Deutz-Allis	Int'l Harvester	See Case
Allison	C-3 or C-4	John Deere	JDM J21A
Belarus	- <sup>A</sup>		JDM J20A, & B & C,
Case IH	CHN MAT 3525		J 14 B & C,
	MS-1230, MS-1210/JIC 145		JD 303 fluid
	MS 1209 (Hy-Tran Ultra)		Quatrol - <sup>D</sup>
	MS-1207 (Hy-Tran Plus)	Kioti	- <sup>B</sup>
	MS 1206 (Powergard PTF)	Komatsu	- <sup>A</sup>
	MS 1205 (TFD II)	Kubota	U. Transdraulic Fluid
	MS-1204/JIC185		UDT Hydraulic
	B-6 (Hy-Tran), B-5	Landini	Tractor II Hydraulic Fluid
	JIC-185 (Hi-Vis)	Leyland	- <sup>A</sup>
	JIC145 (TCH Fluid)	Massey-Ferguson:	M 1144, M 1143
	JIC 144		M-1141 (Permatran III)
	JIC-143 & 146 (TFD)		M-1135, M-1129-A,
Caterpillar	TO-2, other <sup>F</sup>		M-1127-A & B,
Clark	TA 18, TA 12		M-1110 (ATF)
	HR500 and HR 600	McCormick Farmall	- <sup>E</sup>
	Lift Truck Hydraulic Fluid	Minneapolis-Moline	- <sup>E</sup>
David Brown	- <sup>B</sup>	Mitsubishi	- <sup>B</sup>
Deutz-Allis	Power Fluid 821 XL,	New Idea	(see White Farm)
	Power Fluid 821,	Oliver	(see White Farm)
	272843, 257541	Plessy-Sunstrand	Hydraulic fluid
	246634	Renk-Doromat	873 or 874A & B bus
Dresser	Transmission/Hydraulic Fluid		transmissions <sup>C</sup>
Fiat	(see Hesston)	Steiger:	HTF SEMS 17001
Ford New Holland	FHNA 2C201.00	Sunstand	Hydrostatic Transmission Fluid
	M2C134-D, C, B & A	Universal	-
	(Hydraulic Oil 134),	Valmet	- <sup>B</sup>
	M2C41-B, M2C43	Versatile	Hydraulic/Gear Fluid,
	M2C48-A & B		23M and 24M
	M2C53-A & B,	Volvo	WB 101/BM
	M2C92-A, M2C86-B & C	White Farm-	HTF,
Hesston	AF-87		Q-1826
IMT	- <sup>B</sup>		Q 1802 (Type 55 fluid)
			Q-1766B, Q-1722,
			Q 1705
		Yanmar	- <sup>B</sup>
		3525	

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- A) Recommends separate fluids other than a hydraulic tractor fluid.  
 B) No specification was identified. Use Universal Transdraulic Fluid.  
 C) **Unmodified** units only for Renk-Doromat.  
 D) Quatrol is a registered trademark of John Deere and not a specification. It is no longer sold in the marketplace. Universal Transdraulic Fluid may be used where Quatrol is called for.  
 E) These are older tractors, which may specify separate or different fluids than Universal Transdraulic Fluid.  
 F) Many small tractors such as the Caterpillar Challenger series can use Universal Transdraulic Fluid.