

# **Tractor Hydraulic Fluid**

High-performance transmission hydraulic fluid

#### Features & benefits

- Superior load-carrying and wear protection
- Excellent foam resistant properties
- Exceptional vellow-metal protection
- Shear stable
- · Excellent frictional characteristics
- Superior fluidity at low temperatures
- Three formulations to suit your equipment's needs



#### Typical results

Test Method	THF	THF Premium	THF (W)
VISCOSITY (D445) cSt @ 40°C cSt @ 100°C	59.4 9.5	46.4 9.5	38.8 7.5
VISCOSITY INDEX (D2270)	141	196	165
ASTM COLOUR (D1500)	2.0	2.0	2.0
<b>DENSITY @ 15°C</b> (D4052), kg/L	0.86	0.86	0.85
POUR POINT (D97), °C	-42	-64	-50
FLASH POINT (D93), °C	212	201	185
KRL SHEAR after 20 hrs viscosity @ 100 °C (D445), cSt	8.8	7.8	7.0
BROOKFIELD (D2983) cP @ -20°C cP @ -35°C cP @ -40°C	3,820 28,850 71,600	1,365 - 18,500	- - 16,800
FOAM (D892) (Tendency mL / Stability mL) SEQUENCE I (mL/mL) SEQUENCE II (mL/mL) SEQUENCE III (mL/mL)	0/0 10/0 0/0	0/0 30/0 0/0	0/0 30/0 0/0

#### Sizes & order codes

Size	THF	THF Premium	THF (W)
3.78 L (1 US Gal)	-	F0020426	-
18.9 L (5 US gal)	F0079440	F0086140	F0079340
205 L (54.2 US gal)	F0060850	F0015550	-
1000 L (264 US gal)	F0060860	F0020460	-
1000 L (264 US gal) Bulk Tote	F0108301	F0109101	-
Bulk	B0060801	B0020401	B0060001

Irving Tractor Hydraulic Fluids are Universal Tractor Transmission Oils (UTTO) formulated for transmissions, final drives, power take-off, wet brakes, hydraulics, clutches, and power steering systems and designed for use in agricultural, construction, and mining equipment that uses a common fluid reservoir.

**Irving Tractor Hydraulic Fluid** is available in three different grades:

- THF is made with high-quality group II base oils and is recommended for summer operation, but also suitable for year-round use where temperatures are above -25°C.
- THF Premium is fully synthetic and a genuine "all-season" fluid suitable in hot and cold temperatures.
- THF (W) Winter is made with highquality group II/II+ base oils and formulated for extra protection in the cold winter months. Meeting the requirements of J20D.

Irving Tractor Hydraulic Fluids act as a universal hydraulic oil that protects against wear and prevents bronze transfer in piston pumps to prevent loss of efficiency.

Irving Tractor Hydraulic Fluids' frictional characteristics prevent stick/slip problems and reduce brake noise/chatter. They also have superior fluidity at low temperatures with pour points as low as -42°C (THF), -64°C (THF Premium) and -50°C (THF W).

**Irving Tractor Hydraulic Fluids** are not to be used in STOU engine applications.

Please use the following two pages for current and older specifications.

### **Specifications**

✓ Meets requirements ■ Suitable for use

Specifications	THF	THF Premium	THF (W)
23M & 24M	✓	✓	-
AGCO 821XL	✓	✓	-
API GL-4	✓	✓	✓
CNH MAT 3505, 3525	✓	✓	-
CHN MAT 3540 <sup>1</sup>	•	•	-
Deutz-Allis Power Fluid 821XL, 272843	✓	✓	-
Dresser	✓	✓	-
Fiat Hesston AF-87	✓	✓	-
Ford ESN-M2C134-D, Ford ESN-M2C143-A	✓	✓	-
Industry of Machinery and Tractors (IMT)	✓	✓	-
International Harvester Hy-Tran B-6	✓	✓	-
Japanese Construction Mechanization Association (JCMAS), HK P-041	-	•	
JI Case MS-145 (TFD Fluid)	✓	✓	-
JI Case MS-1209 (HyTran Ultra or MultiTran) <sup>1</sup>	•	•	-
JI Case MS-1210	•	•	✓
JI Case MS-1216	•	•	
JI Case MS-1230 (Poclain Equipment)	-	•	-
John Deere J20C	✓	✓	-
John Deere J20D	-	✓	✓
Kioti	✓	✓	-
Komatsu KES 07.866, AXO80, Komatsu-Dresser B06.0002	✓	✓	-
Kubota UDT	✓	✓	-
Kubota Super UDT & UDT2	-	✓	-
Landini	✓	✓	-
MF M1141, M1143, M1145 (UTTO Only)	✓	✓	-
Parker (Denison UTTO) HF-0, HF-1 & HF-2 (except demulsibility)	✓	✓	-
Quatrol	✓	✓	-
Renk-Doromat 87.3 & 874A/B	✓	✓	-
Sauer Sunstrand/Danfoss & Hydrostatic Tranmission Fluid	✓	✓	-
Steiger HTF (SEMS 17001)	✓	✓	-
Valmet	✓	✓	-
Valtra G2-08	✓	✓	-
Valtra G2-B10	-	✓	-
Versatile Gear & Hyd-Trans Fluid	✓	✓	-
Vickers 35VQ25	✓	✓	✓
Volvo WB101 (97303), except for motor grader rear axle (VCE 1273.03)	✓	✓	-
Wet brake applications	✓	✓	✓
White Farm (Oliver) Q-1826	✓	✓	-
Yanmar	✓	✓	-

<sup>&</sup>lt;sup>1</sup>THF and THF Premium are zinc-based chemistry, unlike the zinc-free CHN MAT 3540 and JI Case MS-1209. Irving Blending & Packaging has field trial demonstrations and datasets that demonstrate acceptable performance for both THF and THF Premium in these applications. Do not mix with zinc-free fluids, a complete flush and change should be completed when switching fluids.

## Older Specifications (Obsolete)

✓ Meets requirements

Specifications	THE	THF Premium	THF (W)
	<b>√</b>	<b>√</b>	
Allison C-2, C-3 and C-4			-
Caterpillar TO-2	<b>√</b>	<b>√</b>	✓
Deutz-Allis Power Fluid 25741, 25743, 246634	<b>√</b>	✓	-
Ford FNHA-2-C-200 & 201	<b>✓</b>	✓	_
Ford ESN-M2C-41, 41A & B, & 43	✓	✓	-
Ford ESN-M2C48-B & C	✓	✓	-
Ford ESN-M2C53-A & B	✓	✓	-
Ford ESN-M2C77-A, 78A, 79A	✓	✓	-
Ford ESN-M2C86 A-C	✓	✓	-
Ford ESN-M2C92-A	✓	✓	-
Ford ESN-M2C134-A-C	✓	✓	-
Ford ESN-M2C142-A	✓	✓	-
Ford New Holland M4864-A & B	✓	✓	-
JI Case Case-O-Matic Type A	✓	✓	-
JI Case MS-143, 144 (TFD Fluid)	✓	✓	-
JI Case MS-185 (TFD Fluid)	✓	✓	-
JI Case MS-1204-1205 (Powergard PFT)	✓	✓	-
JI Case MS-1206 (Powergard PFT)	✓	✓	-
JI Case MS-1207	✓	✓	-
John Deere J20A, J20B, J14A-C & J21A	✓	✓	-
MF 1127, 1127 A&B	✓	✓	-
MF M1110	✓	✓	-
MF M1129, M1129A (Permatran)	✓	✓	-
MF M1135 (Permatran III) (UTTO Only)	✓	✓	-
MF M1138 (UTTO Only)	✓	✓	-
MF M1139 (UTTO Only)	✓	✓	-
Sperry Vickers/Eaton I-286S Industrial Hydraulics	✓	✓	-
Sperry Vickers/Eaton M2950S Mobil Hydraulics	✓	✓	-
White Farm (Oliver) 55, Q-1705, Q-1722, Q-1766, Q-1766B, Q-1802	✓	✓	-