



# Tractor Hydraulic Fluid

## High-performance transmission hydraulic fluid

### Features & benefits

- Superior load-carrying and wear protection
- Excellent foam resistant properties
- Exceptional yellow-metal protection
- Shear stable
- Excellent frictional characteristics
- Superior fluidity at low temperatures
- Meets the requirements of major OEMs tractor fluid applications



### Typical results

Test Method	THF	THF SB	THF Premium
<b>VISCOSITY (D445)</b> cSt @ 40°C cSt @ 100°C	59.4 9.5	57.2 9.5	46.4 9.5
<b>VISCOSITY INDEX (D2270)</b>	141	149	196
<b>ASTM COLOUR (D1500)</b>	2.0	2.0	2.0
<b>DENSITY @ 15°C (D4052), kg/L</b>	0.86	0.85	0.86
<b>POUR POINT (D5949), °C</b>	-42	-45	-64
<b>FLASH POINT (D93), °C</b>	212	200	201
<b>KRL SHEAR</b> after 20 hrs viscosity @ 100 °C (D445), cSt	8.8	8.8	7.8
<b>BROOKFIELD (D2983)</b> cP @ -20°C cP @ -35°C cP @ -40°C	3,820 28,850 71,600	2,495 19,550 46,600	1,365 - 18,500
<b>FOAM (D892)</b> (Tendency mL / Stability mL) SEQUENCE I (mL/mL) SEQUENCE II (mL/mL) SEQUENCE III (mL/mL)	0/0 10/0 0/0	0/0 20/0 0/0	0/0 30/0 0/0

### Sizes & order codes

Size	THF	THF SB	THF Premium
3.78 L (1 US Gal)	F0060826	-	F0020426
18.9 L (5 US gal)	F0079440	F0135640	F0086140
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	B0133601	B0020401

**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** product line includes the following:

→ **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 SB** is formulated with premium group II and synthetic base oils, delivering improved cold-temperature performance compared to the conventional THF.

→ **THF Premium** is fully synthetic and a genuine “all-season” fluid suitable in hot and cold temperatures.

**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), -45°C (THF SB) and -64°C (THF Premium).

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

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

**Always consult your owner's manual for verification of fluid type and grade!**

Supporting data available to demonstrate acceptable performance. Check with Sales Associate for the latest product approvals.

Please note these are typical performance indicators and can change without notice.

This data sheet replaces previous versions prior to May 5, 2026.

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## Specifications (Current)

✓ Meets requirements   ■ Suitable for use

Manufacturer (OEM)	Specifications	THF	THF SB	THF Premium
AGCO	Power fluid 821XL	✓	✓	✓
API	GL-4	✓	✓	✓
CHN Industrial N.V. Case IH JI Case New Holland	MAT 3505, 3525	✓	✓	✓
	MAT 3540 <sup>1</sup>	■	■	■
	MS-145 (TFD Fluid)	✓	✓	✓
	MS-1209 (HyTran Ultra or MultiTran) <sup>1</sup>	■	■	■
	MS-1210	■	■	■
	MS-1216	■	■	■
Deutz-Allis	Power Fluid 821XL	✓	✓	✓
	272843	✓	✓	✓
Dresser	Transmission/Hydraulic Fluid	✓	✓	✓
Fiat-Hesston	AF-87	✓	✓	✓
Ford	ESN-M2C134-D ESN-M2C143-A	✓	✓	✓
International Harvester	Hy-Tran B-6	✓	✓	✓
Japanese Construction Mechanization Association (JCMAS)	HK P-041	-	-	■
John Deere	J20C	✓	✓	✓
	J20D	-	-	✓
Kioti	Transmission/Hydraulic Fluid	✓	✓	✓
Komatsu Dresser	KES 07.866, AXO80, B06.0002	✓	✓	✓
Kubota	UDT	✓	✓	✓
	Super UDT <sup>2</sup>	-	-	✓
	Premium UDT	-	-	✓
Landini	Transmission/Hydraulic Fluid	✓	✓	✓
Massey-Ferguson	MF M-1141 (Permatran® 821XL, formerly Permatran® III)	✓*	✓*	✓*
	MF M-1143 M-1145 * (UTTO only. Do not use in STOU engine applications)	✓*	✓*	✓*
Parker (Denson)	HF-0 (HF-1 and HF-2) * (except demulsibility)	✓*	✓*	✓*
Renk-Doromat	873	✓	✓	✓
	874 A/B	✓	✓	✓
Sauer Sunstrand / Danfoss	Hydrostatic Transmission Fluid	✓	✓	✓
Steiger	HTF (SEMS 17001)	✓	✓	✓
Valtra (Valmet)	G2-08	✓	✓	✓
	G2-B10	-	-	✓
Versatile	23M, 24M Gear and Hyd-Trans Fluid	✓	✓	✓
Vickers	35VQ25	✓	✓	✓
Volvo	WB101 (97303), VCE 1273.03 * (not for use in motor grader rear axle)	✓*	✓*	✓*
White Farm (Oliver)	Q-1826	✓	✓	✓
Yanmar	Transmission/Hydraulic Fluid	✓	✓	✓

<sup>1</sup> THF, THF SB 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 the THF line of products in these applications. Do not mix with zinc-free fluids, a complete flush and change should be completed when switching fluids.

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## Older Specifications (Obsolete)

✓ Meets requirements

Manufacturer (OEM)	Specifications	THF	THF SB	THF Premium
Allison	C-2, C-3, C-4	✓	✓	✓
Caterpillar	TO-2	✓	✓	✓
Deutz-Allis	25741, 25743, 246634	✓	✓	✓
Ford	FNHA-2-C-200, 201 ESN-M2C-41, 41A-B, 43 ESN-M2C48-B, C SN-M2C53-A, B ESN-M2C77-A, 78A, 79A ESN-M2C86 A-C ESN-M2C92-A ESN-M2C134-A-C ESN-M2C142-A New Holland M4864-A, B	✓	✓	✓
CHN Case IH JI Case New Holland	Case-O-Matic Type A MS-143, 144 (TFD Fluid) MS-185 (TFD Fluid) MS-1204-1205 (Powergard PFT) MS-1206 (Powergard PFT) MS-1207	✓	✓	✓
John Deere	J20A, J20B, J14A-C, J21A	✓	✓	✓
Massey-Ferguson	M-1127 A/B M-1110 M-1129-A (Permatran®) MF M1135 (Permatran® III) M-1138 M-1139 * (UTTO only. Do not use in STOU engine applications)	✓*	✓*	✓*
Sperry Vickers/Eaton	I-286S Industrial Hydraulics M2950S Mobil Hydraulics	✓	✓	✓
White Farm (Oliver)	Type 55, Q-1705, Q-1722, Q-1766, Q-1766B, Q-1802	✓	✓	✓



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