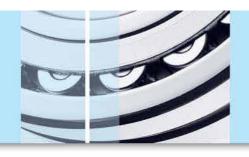
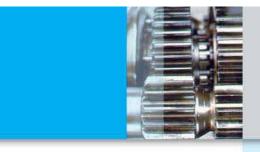
# High performance multifunctional tractor hydraulic fluid

Product Data Sheet







## **Product description**

1000 THF is a high performance multifunctional tractor hydraulic fluid especially formulated for use in transmissions, final drives, wet brakes, and the hydraulic systems of tractors and other equipment employing a common fluid reservoir, and for the wet brake transaxles in off-road equipment. This type of fluid is also referred to as a Universal Tractor Transmission Oil (UTTO).

1000 THF is designed with premium Group II base oils, a viscosity index (VI) improver, oxidation and corrosion inhibitors, anti-wear and film strength additives, an antifoaming agent, and a pour point depressant, to offer optimum smooth operation across a wide temperature range.

Although it is not designed to align exactly with the SAE J300 viscosity classification system, it approximates to the SAE 15W-30 viscosity grade.

#### **Customer benefits**

- Advanced additives help protect against scuffing and wear under severe operating conditions, offering maximum equipment life
- Formulated to offer suppressed brake 'chatter' and transmission 'slip' for quiet and efficient equipment operation
- Designed for a wide range of multifunctional tractor hydraulic system applications, helping reduce product inventories and costs
- Helps keep metal components clean and free of harmful varnish and sludge, promoting reduced maintenance downtime
- Protects against rust and corrosion in precision parts when operating in humid conditions and during seasonal shutdown and storage

## **Applications**

1000 THF meets the needs of modern tractors for a multi-functional lubricant. It is designed for a range of uses, such as lubrication of the transmission and final drive, and serves as a hydraulic fluid to operate power steering units, brakes, implements, and attachments

1000 THF is formulated to suppress brake 'chatter' and excessive brake facing wear. It offers smooth operation of clutch packs and wet brakes, is designed for good shifting

### **Product features:**

- Helps protect against scuffing and wear
- Formulated for quiet and efficient operation
- Designed to reduce inventories and costs
- Offers resistance to varnish and sludge
- Provides protection against rust and corrosion

### Selected specification standards include:

- AGCO
- API
- **Case Corporation**
- Case New Holland
- Caterpillar
- Ford
- Ford New Holland
- Hitachi
- International Harvester
- John Deere
- Kubota
- Massey Ferguson
- Minneapolis-Moline
- Oliver
- Renk Doromat
- Volvo
- White Farm Equipment









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action, offers reliable rust and corrosion protection for vital parts, and helps minimise leakage because of good compatibility with seals, O-rings, and packing materials

It helps prevent sludge and varnish formation, protects metal surfaces against scuffing and wear, and provides lubrication for spur, helical, and spiral bevel final drive gears

1000 THF is compatible with a range of equipment manufacturer's proprietary fluids and other fluids of this type

#### 1000 THF is recommended for use:

- ABB Dodge controlled start-up transmissions
- Non-hypoid API GL-4 applications.
- Hitachi mid-sized wheel loader axle applications, transfer case and hydraulics

1000 THF is also a suitable hydraulic fluid for many types of hydraulic system requiring an anti-wear hydraulic fluid in this viscosity range. It passes the High Pressure Vane Pump Test, ASTM D2882, with less than 15 mg steel weight loss

Some automotive axles require a special friction-modified limited slip fluid. Although 1000 THF is friction modified, it does not have the EP performance needed in applications requiring a GL-5 limited slip fluid. 1000 THF should not be used in limited slip applications unless a fluid of this type is explicitly permitted

### Approvals, performance and recommendations

#### **Approvals**

Volvo 97303 (WB 101) [1]

#### Performance

• Hitachi Rigid Dump Trucks<sup>[3]</sup>

John Deere JDM J20C

#### Suitable for use

AGCO Improved power fluid 821XL

API GL-4 [2]
Case Corporation JIC-143
Case Corporation JIC-145
Case Corporation MS 1206



MS 1207





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**Case Corporation** 

•	Case Corporation	MS 1209
•	Case Corporation	MS 1210 (TCH)
•	Case New Holland	CNH MAT 3505
•	Case New Holland	CNH MAT 3525
•	Case New Holland	CNH MAT 3540 <sup>[4]</sup>
•	Caterpillar	TO-2
•	Ford	ESN-M2C134-D
•	Ford New Holland	FNHA-2-C-201.00
•	International Harvester	B6
•	Kubota	UDT
•	Massey Ferguson	CMS M1135
•	Massey Ferguson	CMS M1141
•	Massey Ferguson	CMS M1143
•	Massey Ferguson	CMS M1145
•	Minneapolis-Moline	Q-1722
•	Minneapolis-Moline	Q-1766
•	Minneapolis-Moline	Q-1766B
•	Oliver	Q-1705
•	Renk Doromat	874A

Renk Doromat

ZF

ZF

ZF

ZF

White Farm Equipment

874B

Q-1826

TE-ML 03E

TE-ML 05F

TE-ML 17E

TE-ML 21F

<sup>[1]</sup> Volvo approval number: 004

<sup>[2]</sup> Under low speed-high torque conditions. Not recommended for on-highway applications.

<sup>[3]</sup> Model codes EH3500AC-3, EH4000AC-3 & EH5000AC-3

<sup>&</sup>lt;sup>[4]</sup> For tractors requiring MAT 3540, except for the following tractors build after 2012: Case IH Steiger, Quadtrac, Magnum, and New Holland T8 and T9 series.







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# Typical test data

1000 THF	TEST METHOD	RESULTS	
Shelf Life: 60 months from date of filling indicated on the product label			
Density, 15°C, kg/l	ASTM D4053	0.872	
Pour Point, °C	ASTM D5950	-45	
Kinematic viscosity,			
mm²/s @ 40°C	ASTM D445	9.3	
mm²/s @ 100°C	ASTM D445	59	
Viscosity Index	ASTM D2270	142	

This bulletin was prepared in good faith from the best information available at the time of issue. While the values and characteristics are considered representative, some variation, not affecting performance, can be expected. It is the responsibility of the user to ensure that the products are used in the applications for which they are intended.

Produced by Chevron Global Lubricants: Africa, Middle East and Pakistan

Environment, Health and Safety Information is available on this product in the Material Safety Data Sheet (MSDS) and Customer Safety Guide. Customers are encouraged to review this information, follow precautions and comply with laws and regulations concerning product use and disposal. To obtain a MSDS for this product, visit www.caltexoils.com.