

<b>Product</b>	<b>Sinopec Hydraulic-Transmission-Brake Multifunctional Fluid 10W-30</b>
<b>Summary</b>	<b>Product description</b> Sinopec Hydraulic-Transmission-Brake Multifunctional Fluid 10W-30 is an extra high-performance universal tractor transmission oil (UTTO), formulated with high-quality hydrotreated base oils and a multifunctional additive system. It designed to meet or exceed hydraulic and transmission fluid requirements, and to reduce wet brake and power take-off (PTO) chatter. It ensures excellent performance in agricultural and commercial tractors operating in a wide range of environments and conditions, and is particularly useful in equipment where a common lubrication system supplies oil for different applications.

## Applications

Sinopec Hydraulic-Transmission-Brake Multifunctional Fluid 10W-30 is suitable for use in:

- Transmission and hydraulic systems, wet brakes and final drives of tractors and other agricultural or forestry equipment with common lubrication systems, where a UTTO type lubricant is required.

## Features and benefits

- A multifunctional oil for hydraulic, transmission and wet-brake systems, and suitable for high-power tractors.
- Excellent shear stability ensures good viscosity retention even in conditions of high temperature and heavy load, and prolongs the service life of hydraulic transmission systems.
- Outstanding fluidity and good low-temperature properties ensure smooth start up and operation even in cold weather.
- A special friction modifier ensures smooth action in wet brakes and power take-off clutches, minimises vibration, chatter, stick-slip and squawk, and prolongs service life.
- Good antiwear performance protects moving parts from wear and metal fatigue, ensures long equipment life, and provides excellent protection against gear scuffing, pitting and wear in applications where an API GL-4 product is required.
- Excellent thermal and oxidation stability minimise the formation of deposits that could lead to component wear, and also ensure longer oil life.
- Excellent protection against rust and corrosion, increases the service life of system components.
- Good antifoaming properties ensure optimum oil film thickness is maintained and reduces oil leakage from the system.
- Good compatibility with most common seals and elastomer materials used in agricultural equipment, prolongs seal life and reduces leakage.

## Typical data

<b>Sinopec Hydraulic-Transmission-Brake Multifunctional Fluid 10W-30</b>	
SAE grade	10W-30
Kinematic viscosity, ASTM D 445	
cSt @ 40°C	63.38
cSt @ 100°C	10.08
Viscosity index, ASTM D 2270	145
Brookfield viscosity, ASTM D 2983	
cP @ -35°C	29,000
cP @ -20°C	4,350
Pour point, °C, ASTM D 97	-43
Flash point (COC), °C, ASTM D 92	236
Density @ 15°C, kg/l, ASTM D 4052	0.867

These data are given as an indication of typical values and not as exact specifications.

## Industry and OEM specifications

<b>Sinopec Hydraulic-Transmission-Brake Multifunctional Fluid 10W-30 meets the performance requirements of the following industry specifications:</b>	
API Service Classification	Automotive Gear Lubricant: GL-4

<b>Sinopec Hydraulic-Transmission-Brake Multifunctional Fluid 10W-30 meets the performance requirements of the following OEM specifications:</b>	
Allison	C-4 (agricultural applications only)
Case	M1206, MS1207, M1210
Caterpillar	TO-2
CNH	MAT 3525
Ford	ESN-M2C134-D (FNHA-2-C-201.00)
John Deere	JDM J20C and J20D
Kubota	UDT
Massey Ferguson	M1135, M1141, M1143
Volvo CE	WB-101
<b>Sinopec Hydraulic-Transmission-Brake Multifunctional Fluid 10W-30 holds the following formal OEM approvals:</b>	
ZF	TE-ML-03E, TE-ML-05F

## Accuracy of information

Data provided in this PDS is typical and subject to change as a result of continuing product research and development. The information given was correct at the time of printing. The typical values given are subject to variations in the testing procedures and the manufacturing process may also result in slight variations. Sinopec guarantees that its lubricants meet any industry and OEM specifications referred to on this data sheet.

Sinopec cannot be held responsible for any deterioration in the product due to incorrect storage or handling. Information on best practice is available from your local distributor.

## Product and environmental safety

This product should not cause any health problems when used in the applications suggested and when the guidance provided in the Material Safety Data Sheet (MSDS) is followed. Please consult the MSDS for more detailed advice on handling; MSDSs are available from your local distributor. Do not use the product in applications other than those suggested.

As with all products, please take care to avoid environmental contamination when disposing of this product. Used oil should be sent for reclamation/recycling or, if not possible, must be disposed of according to relevant government/authority regulations.

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