



# LUCAS OIL PRODUCTS, INC. PRODUCT DATA SHEET

## SYNTHETIC UNIVERSAL HYDRAULIC FLUID



Lucas Oil Synthetic Universal Hydraulic Fluid is a fully synthetic multipurpose powershift transmission/hydraulic fluid intended for a wide range of power-driven equipment. It exceeds the performance requirements for many agricultural, construction, and other off-highway and industrial equipment and applications.

Lucas Oil Synthetic Universal Hydraulic Fluid is formulated to provide outstanding low temperature performance in cold-weather applications. It contains a unique additive system that provides multi-functional and multi-system protection, matched for a wide array of OEM hardware. It provides outstanding wear protection for gears and tractor hydraulic system components. Our unique extreme pressure additives help to prevent scuffing and gear-tooth galling during shock loading, while our specialty blend of polymers help maintain viscosity and film strength over a wide operating temperature range. Our formulation also contains tackifiers which improve the clinging power of the oil, ensuring lubricant is always present - from start up to shut down.

Lucas Oil Synthetic Universal Hydraulic Fluid meets the requirements of all OEM specifications for powershift transmissions including gears, pumps, final drives, bearings, wet brakes, transmissions, and PTO clutch applications. Meets and exceeds JOHN DEERE specifications J20A, J20B, J20C, J20D, and is suitable for use where HY-GARD is recommended.

### PART NUMBER AND SIZE:

10100 – 5 Gallon  
10524 – 55 Gallon  
10851 – 330 Gallon

### FEATURES AND BENEFITS:

- Fully synthetic formulation.
- Outstanding low temperature fluidity for maximum protection.
- Formulated for longer fluid and component life.
- Polymer modified for increased fluid film strength at high operating temperatures.
- Outstanding wear and anti-scuffing protection.
- Meets and exceeds OEM specifications for power shift transmissions.

### MAIN APPLICATIONS:

Lucas Oil Synthetic Universal Hydraulic Fluid is a multipurpose powershift transmission/hydraulic fluid, often called Tractor Hydraulic Fluid (THF) intended for a wide range of power-driven equipment. Exceeds performance requirements for agricultural, construction and other off-highway and industrial equipment. Synthetic formula for long fluid life and for use in cold-weather conditions. Friction modified for broad performance and applications but should not be used where Caterpillar TO-4 or the like are recommended (fluids which are not friction modified).



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## SPECIFICATIONS, APPROVALS AND RECOMMENDATIONS:

Meets all OEM specifications for powershift transmissions including gears, pumps, differentials, final drives, bearings, wet brakes, transmissions, and PTO clutch applications. Meets and exceeds JOHN DEERE specifications J20A, J20B, J20C, J20D. Suitable for use where HY-GARD is recommended.

Suitable for use in the following applications:

AGCO-Allis  
AGCO-Allis Power Fluid 821XL® (Current)  
Allis-Chalmers Power Fluid 821®  
Deutz-Allis 272843, 257541, 246634  
Massey-Ferguson M-1110, M-1127A and M-1127B, M-1129A, M-1135 (Current Worldwide), M-1141 (Current EP THF), M-1143 (Finished Oil), M-1145 (Finished Oil)  
White Farm Equipment including Q-1826 (Current)  
Minneapolis-Moline Q-1766, Q-1722, Q-1766B  
Oliver Q-1705  
New Idea Q-1802, Type 55  
Allison C-2, C-3 and C-4 (Allison no longer recommends Tractor Hydraulic Fluids for use in their transmissions)  
Caterpillar TO-2, Multipurpose Tractor Oil (MTO)  
CNH Global N.V.  
Case International including MS-1206, MS-1207, MS 1209, MAT 3505, MAT 3540 (Current, zinc-free THF)  
Case-IH MS-1210, JIC 145  
JI Case JIC 143 / 144  
International Farmall MS-1204, JIC 185  
International Harvester B-5, B-6 (International Harvester)  
Steiger SEMS 17001 (Steiger)  
New Holland (Fiat) including:  
Ford and New Holland FNHA-2-C-200, FNHA-2-C-200A, FNHA-2-C-201, MAT 3525, 3526 (Current), ESN-M2C41-B, ESN-M2C43, ESN-M2C48-A and ESN-M2C48-B, ESN-M2C53-A and ESN-M2C53-B, ESN-M2C86-B and ESN-M2C86-C (3), ESN-M2C92-A, ESN-M2C134-A, B, C, D  
Sperry-Vickers 35VQ25 and M-2952-S (Vickers), I-286-S (Vickers), M-2950-S (Vickers)  
Versatile Specification 23M or 24M (Versatile)  
Hesston-Fiat (tractors only) AF-87, Multi-F, Multi-G (Current)  
John Deere JDM J20C and J20D (Current), JDM J20A and J20B, JDM J14B and J14C, JDM J21A, JDT 303, Quatrol®  
Komatsu Dresser B-06-0001 and B-06-0002  
Kubota UDT (Current)  
Renk Doromat 873, 874 A and 874 B (Current)  
Volvo CE WB-101  
ZF TE-ML 03E / 03F / 05F / 06E / 06F / 06K / 17E / 21F

Suitable for use in the following OEM Equipment and applications:

API GL-4, Argo S.p.A., Arvin Meritor, Belarus, Buhler, Clark, Claas, David Brown (part of CNH), Denison HF-0, HF-1 & HF-2, DEXRON and Type A, Suffix A (tractor), Eaton Hydraulics, Ebru, Fendt, Ford, Fort and Pegoraro (part of Argo S.p.A.), Gleaner (part of AGCO), Hurlimann, Ingersoll Rand, IMT, International Harvester, International Hough (Dresser), JCB, JI Case, KH Duetz, Kioto, Komatsu and Komatsu/ Dresser, Kubota, Lamborghini, Landini S.p.A. (part of Argo S.p.A.) Laverda (part of Argo S.p.A.), Leyland, Link Belt, Mahindra, McCormick (part of Argo S.p.A.), Mitsubishi Poclain, Renk, Rockwell Transmissions, Same Deutz-Fahr, Sauer Sundstrand, Schluter, Steyr Daimler, Sundstrand Hydraulics (Plessey), Taylor, Universal, Ursus, Valmet, Valpadana (part of Argo S.p.A.), Valtractores, Versatile, Vickers Hydraulics, Volvo, Yanmar, Zetor



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## TYPICAL PHYSICAL CHARACTERISTICS:

PROPERTIES	ASTM	TYPICAL
API Gravity	D4052	35.5
Specific Gravity @ 60°F	D4052	0.8473
Density @ 60°F, Lbs/US Gal	D4052	7.055
Viscosity @ 40°C cSt	D445	56.9
Viscosity @ 100°C cSt	D445	10.5
Viscosity Index	D2270	178
Brookfield Viscosity @ -40°C, cP	D2983	16000
Pour Point, °C (°F)	D97	-45 (-49)
Color	Visual	Clear yellow
Flash Point, COC °F	D92	470

These characteristics are typical of current production. However, slight variations in these characteristics may occur.

## LINKS AND ADDITIONAL INFORMATION:

For additional product or health and safety information, including product Safety Data Sheets, visit [LucasOil.com](https://www.lucasoil.com)