



AGRA UTTO SUPREME

Full Synthetic Extreme Performance Tractor Hydraulic, Transmission and Wet Brake Fluid

REPLACES OF ALL AGRICULTURAL OEM FLUIDS

DESCRIPTION

TRIAx AGRA UTTO Supreme represents the peak of multi-functional tractor fluid technology in all respects. This is a true-multi-functional UTTO Type fluid (Universal Tractor Transmission Oil) all season ultra-high performance fluid designed for agricultural and construction equipment requiring a multi-application fluid for transmissions, wet brakes and hydraulic systems. AGRA UTTO Supreme features an exceptionally high Viscosity index and flows in temperatures down to - 47 C or -52 F while providing outstanding thermal transfer and lubrication in hot ambient temperatures. Full synthetic formulation assures continuous operation and stability in high load, high torque applications.

WET BRAKE PROTECTION - excellent film integrity assures smooth brake operation, without vibration and chatter.

APPLICATIONS

TRIAx AGRA UTTO Supreme is recommended for an extremely wide range of agricultural and heavy duty off-road transmission and hydraulic applications, for use in a majority of farm tractors, combines, construction equipment and severe service hydraulic systems, including late generation Fendt Variable Transmissions (Fendt VARIO). TRIAX AGRA UTTO Supreme meets or exceeds the performance requirements set by virtually all tractor OEM's, especially high performance requirements of John Deere, CASE, CLAAS, New Holland, Massey Ferguson for hydraulic and transmission applications. TRIAX AGRA UTTO XL is recommended for agricultural and construction equipment combinations of transmissions, hydraulic systems, final drives, power take-off systems and wet brakes, operating in "all-weather" hot and cold temperatures, including, but not limited to John Deere (all tractors), Case, VOLVO, Caterpillar, Kubota, Komatsu, Ford, New Holland, Fendt, Deutz Fahr, Massey Ferguson, CLAAS, JCB and many others. **This product is recommended as a direct replacement for John Deere Hy-Gard™ and Hy-Gard Low Vis Tractor Hydraulic Transmission Oil, Ambra™ MULTI G for API GL-4 and MAT 3525 UTTO, AKCELA™ HY-TRAN Ultra for and AKCELA Nexlore UTTO fluids.**



69% LESS BRAKE WEAR than JDQ 94 wet brake specification requirements.

97% LESS SLUDGE than conventional HTF fluids.

PERFORMANCE

Proven field tests performance on 250 pieces of equipment over 250,000 hours of operation on John Deere, New Holland, Ford, J. I. Case, International Harvester, Massey-Ferguson and Kubota tractors (tested by Lubrizol Corporation). Field tests included hydraulic OEM equipment requiring the following specifications: Sperry Vickers I-286-S (Industrial), M-2950-S (Mobile Equipment), Denison HF-0, HF-1, HF-2, Sundstrand Hydraulics, Cincinnati Milacron P-68, P-69, P-70.

- 42% less sludge and deposits than OEM specification for Oxidation Resistance in 4L60E Transmission Oxidation Field Test**
- 33.7% less slippage in Powershift Transmission tests vs Allison C-4 OEM requirements**
- 22.7% more Mid-point Friction Coefficient retention vs OEM requirements**

MASSEY-FERGUSON M1141 TRANSMISSION / CLUTCH TEST

37% less wet brake chatter vs OEM specs of Massey Ferguson and John Deere (according to 250,000 hours of field testing)
43.6% more input torque to the fly wheel than Permatran III reference oil for M1141 field test

J20C /D JOHN DEERE HYDRAULIC, TRANSMISSION & FINAL DRIVE TEST

Up to 53% BETTER performance than OEM requirements for JDQ95 Spiral Bevel & Final Drive, JDQ96 Brake Torque Variation and Friction Retention, JDQ94 PST Clutch Performance, JDQ84 Hydraulic Pump Performance

- Outstanding thermal and oxidative stability
- Corret and flawless multi-disc clutch operation in severe service
- Outstanding seal protection - dramatically improves hose flexibility, life, positive seal seating, reduces oil leaking if any - compatible with all seal materials. Patented seal protection for all types of natural or synthetic seals found in modern construction and farm equipment.
- Exceptional copper component protection
- Exceptional detergency
- Excellent rust protection, filterability
- Virtually zero foaming
- Facilitates flawless hydraulic response and brake operation in nearly ALL operating conditions
- Exceptional load carrying characteristics
- Contains Nitrogen based cleaning system to prevent sludge and varnish formations, while protecting metal surfaces against scuffing and wear, providing continuous outstanding lubrication for spur, helical, and spiral, bevel final drive gears.
- Exceptiona anti-wear protection in all load conditions for a wide range of equipment.



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PRODUCT SPECIFICATIONS

AGCO/Allis Chalmers Powerfluid 821XL
AGCO Q-1722, Q-1766, Q-1826 (Whitefarm)
AGCO White Q-1826
Case Corporation – JIC-143, JIC-144, JIC-145, JIC 185
CASE NEW HOLLAND (CNH) MAT 3505 (1209), MS1204, MS1205, MS1206, MS1207, MAT 3506 (MS1210), CNH MAT 3509 (MS1230), MAT 3525 (FNHA-201.00 = M2C 134D), MAT 3526 (FNHA 2-C-200.00), MAT 3510 (MS1317 = GL-4), MAT 3540,
Caterpillar TO-2
Ford ESN M2CC53-B, M2C48-A, M2C86-C, M2C43, M2C41-B, M2C92-A 4141-B, M2C48-B, M2C53-C, M2C77-A, M2C86-B, M2C 86B and C, Ford ESN-M2C 134-A,B,C,D
FNHA- 2- C - 201.00
Denison Hydraulics HF-0, HF-1 & HF-2
John Deere JDM J20C, J20D, J14B, J14C, J21A, 303
Flat-Hesson tractors Multi-G, AF-87, Multi-F
Deutz-Fahr
Fendt (Non Vario, Fendt (Vario)
HTF 272843, 257541, 246634
Massey Ferguson CMS M1135, CMS M1141, CMS M1143, CMS M1145
Oliver – Type 55
Renk Doromat 874 A and 874 B
International Harvester B6
Kubota UDT
Komatsu
Landini
Claas/Renault (Renault Transmissions)
Same (Same Transmissions)
Stieger
Sundstrand
Versatile Specification 23M or 24M
Vickers
VCE WB 101 and WB 102
Volvo VME, WB101
ZF TE-ML, ZF TE-ML – 03E, 03F, 05F, 06E, 06F, 06K, 17E, 21F
Allison C-3, C-4
API GL-4
Massey Ferguson M-1100, M-1127, M-1129, CMS M1135, M1141, CMS M1143, M1145 - Approved
Case New Holland CNH MAT 3525 (Ford ESN-M2C 134-D , FNHA- 2- C - 201.00
Case New Holland CNH MAT 3505 (MS 1209) back serviceable to MS 1207 and MS 1206
MS – 1204, 1205, 1206, 1207, 1209, 1210, 1230, 1317, CNH MAT 3509, CNH MAT 3510,
ESN-M2C134 – A, B, C, D, ESN –M2C53-A, B, ESN-M2C48 – A, B
ESN-M2C43, ESN-M2C41-B, ESN-M2C92-A
JIC 143, 144, 145, 185
B-5, B-6, SEMS 17001
Vickers I-266-S, Visckers M – 2950-S, Vickers 35VQ25 and M-2952-S
Versatile Specification 23M or 24M
Power Fluid PF-821XL, Power Fluid 821
272843 Hydr Trans Fluid, 257541 Hydr Trans Fluid, 246634 Hydr Trans Fluid
M-1135, M-1138, M-1143, M-1110, M-1127A and B M-1192A Permatran
White Q-1766, 1722, 1766B, 1705, 1802, Type 55

TRiAX AGRA UTTO Supreme covers the following tractor, transmission and hydraulic systems manufacturers

| | |
|--|---------------------------------|
| Argo S.p.A | Landini S.p.A (part of S.p.A), |
| Arvin Meritor | Laverda (part of Argo S.p.A) |
| Belarus | Leyland |
| Buhler | Link Belt |
| Clark | Mahindra |
| Class | Massey Ferguson |
| Dave Brown (part of CNH) | McCormick (part of Argo S.p.A.) |
| Dexron and Type A, Suffix A (Tractor) | Mitsubishi Pociain |
| Eaton Hydraulics | Renk |
| Ebru | Rockwell Transmissions |
| Fendt (non-Vario) | Same Deutz-Fahr |
| Fendt (Vario) | Sauer Sundstrand |
| Fort and Pegoraro (Part of Argo S.p.A) | Schluter |
| Gleaner (part of AGCO) | Steiger |
| Hurlimann | Steyr Daimler |
| Ingersoll Rand | Sundstrand Hydraulics (Piessey) |
| IMT | Taylor |
| International Hough (Dresser) | Universal |
| JCB | Ursus |
| John Deere | Valmet |
| JI Case | Valpandana (part of S.p.A.) |
| KH Duetz | Vaitractores |
| Kioto | Versatile |
| Komatsu and Komatsu/Dresser | Vickers Hydraulics |
| Kubota | Volvo |
| Lamborghini | Yanmar |
| | Zetor |

TRiAX AGRA UTTO Supreme formulations have been field tested against OEM grade products and found to match or surpass the following OEM performance requirements.

John Deere Tractors
Case IH Tractors
Massey Ferguson Tractors
New Holland Tractors
Zetor

UNMATCHED RELIABILITY, ECONOMY AND PROTECTION FOR OEM RECOMMENDED APPLICATIONS

CAN BE USED IN ALL NEW EQUIPMENT STILL UNDER OEM WARRANTY

YOUR NUMBER ONE CHOICE FOR AGRICULTURAL LUBRICANTS



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TYPICAL CHEMICAL PROPERTIES

Small variations which do not affect performance are expected in manufacturing tolerance limits

| Criteria Information | Test Method | Typical Value |
|---|-------------------------------|---------------|
| Gravity, °API | ASTM D4052 | 35.50 |
| Specific Gravity @ 60°F (15.6°C) | ASTM D4052 | 0.846 |
| Viscosity @ 40°C cSt | ASTM D445 | 53.5 |
| Viscosity @ 100°C cSt | ASTM D445 | 9.4 |
| Pour Point °C (°F) | ASTM D5950 | -47°C (-52°F) |
| Flash Point °C (°F) | ASTM D92 | 215 |
| Viscosity Index | ASTM D2270 | 176 |
| Color | ASTM D1500 | RED |
| Zinc, wt. % | ASTM D5185 | 1071 |
| Sulfur | ppm | 1520 |
| Phosphorous | ppm | 2646 |
| Nitrogen | ppm | 352 |
| Foam Seq. I (Tendency/Stability), mL | ASTM D892 (Opt. A) | 0/0 |
| Foam Seq. II (Tendency/Stability), mL | ASTM D892 (Opt. A) | 0/0 |
| Foam Seq. III (Tendency/Stability), mL | ASTM D892 (Opt. A) | 8/0 |
| John Deere Q23 Foaming Sequence Approval | Sequence I | 0/0 |
| | Sequence II | 0/0 |
| | Sequence III | 0/0 |
| NF T60-229 Foaming tendency / stability (ml / ml) | Sequence I (24 C) | 0/0 |
| | Sequence I (93 C) | 10/0 |
| | Sequence I (24 C) after seq I | 0/0 |
| NF T60-129 Foaming tendency / stability (ml / ml) | Sequence I (24 C) | 0/0 |
| | Sequence I (93 C) | 10/0 |
| | Sequence I (24 C) after seq I | 0/0 |
| ISO 2160 Copper Corrosion (3H 100C) | ISO 2160 | 1A |
| NF M07-015 Copper Corrosion | NF M07-015 | 1A |

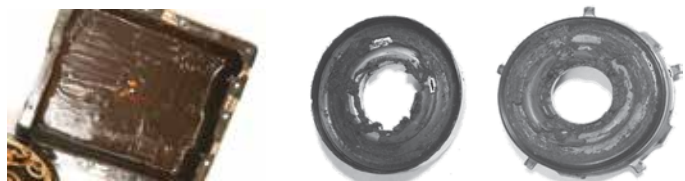
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Sludge from regular HTF after 500 hours



TRIAX Agra UTTO Supreme after 2000 hours

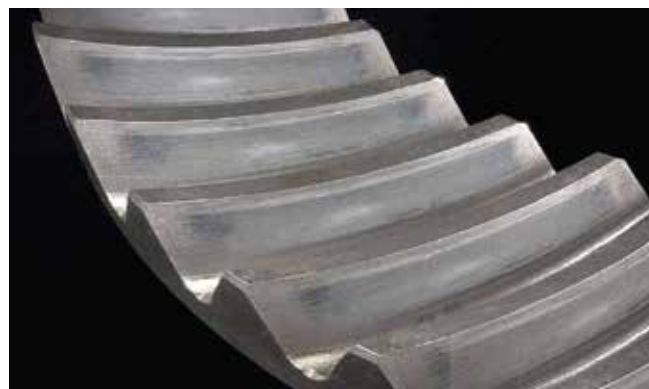


90% less sludge

Gear scoring from regular tractor fluids on pinion and ring



TRIAX Agra UTTO Supreme after 2000 hours
80% less gear wear



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