



**PREMIUM
LUBRICANTS**

T+HF

TRANSMISSION HYDRAULIC FLUIDS

T-HF (TRANS-HYDRAULIC™ Fluid) products are premium, heavy-duty fluids. Each product has been tested against the performance standards of industry-leading original equipment manufacturers that recommend a high-performing single fluid for a common oil-reservoir system.

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T-HF

TRANS-HYDRAULIC™

PRODUCT DESCRIPTION

T-HF has been specifically engineered as a multi-purpose fluid that has been tested against the most recent specifications set by tractor and transmission manufacturers to protect a variety of components to the highest degree possible. The premium formula of select base oils and a unique additive package make T-HF ideal for multiple functions within the transmission and hydraulic oil system.

PERFORMANCE FEATURES

- Extended service intervals
- Anti-rust protection
- Enhanced oxidation stability
- Great viscosity retention, resists thinning
- Excellent shear stability, leads to better component protection
- Outstanding wear protection, meets or exceeds major OEM specifications

APPLICATIONS

T-HF has been designed for multiple industries: agriculture, construction, forestry and mining. It can be used in a variety of equipment in these industries that use a common reservoir for transmissions, hydraulics, differentials, wet brakes and power steering. It is recommended and/or suitable for a variety of OEM equipment: John Deere, New Holland, Case IH, Massey Ferguson and others.

TECHNICAL PROPERTIES

The values listed below are typical of current production. As variations may occur, these numbers do not constitute a specification.

| PROPERTIES | TEST METHODS | T-HF |
|--|--------------|---------------|
| SAE Grade | — | 10W-30 |
| Kinematic Viscosity cSt @ 40°C | ASTM D445 | 60.1 |
| Kinematic Viscosity cSt @ 100°C | ASTM D445 | 9.5 |
| Viscosity Index | ASTM D2270 | 140 |
| Pour Point, °C | ASTM D97 | -45° |
| Brookfield Viscosity cP @ °C | ASTM D2983 | 4,060 @ -20° |
| | | 34,500 @ -35° |
| KRL Test @ 20 Hours, Viscosity cSt @ 100°C | DIN 51350/6 | 6.6 |
| Sonic Shear Test @ 40mins, Viscosity cSt @ 100°C | ASTM D5261 | 7.6 |

T-HF

TRANS-HYDRAULIC™

PERFORMANCE SPECIFICATIONS

T-HF is approved and/or recommended for use in the following:

| INDUSTRY/OEM | T-HF SPECIFICATIONS |
|----------------------|---|
| AGCO | POWER FLUID 821 XL |
| ALLISON | C-4/C-3/C-2 |
| API | GL-4 |
| CASE IH | MS-1210/MS-1209/MS-1207 |
| CNH | MAT 3525/MAT 3505 |
| EATON VICKERS | I-286-S/M-2950-S/35VQ25 |
| FORD | EDN-M23C134D & ESN-M2C134-A/B/C |
| FORD NEW HOLLAND | FNHA-2-C-201.00 |
| JOHN DEERE | JDM J20C & J20A |
| KUBOTA | UDT |
| MASSEY FERGUSON | M-1143 & M-1141 |
| NEW HOLLAND | NH410B |
| PARKER DENISON | HF-2/HF-1/HF-0 |
| VOLVO | WB 101 |
| WHITE FARM EQUIPMENT | Q-1826 & Q-1722 |
| ZF TRANSMISSIONS | TE-ML 03E/TE-ML 05F/ TE-ML 17E/TE-ML 21F |

PRODUCT SELECTION

Product availability can vary by location. Please contact your local retail Co-op for further details.

| PRODUCT SIZES | T-HF |
|---------------|------|
| 1 L Bottle | |
| 5 L Bottle | ✓ |
| 10 L Bottle | ✓ |
| 20 L Pail | ✓ |
| 110 L Drum | ✓ |
| 205 L Drum | ✓ |
| 1000 L Tote | ✓ |
| Bulk | ✓ |

SAFETY DATA SHEETS

Product-specific safety data sheets (SDS) can be obtained by contacting your local retail Co-op or Federated Co-operatives Limited (see contact information below) or by going online at www.fuel.crs.

RECYCLING OF USED LUBRICANTS AND CONTAINERS

Please protect the environment when disposing of petroleum products. All products should be taken to an authorized collection facility or picked up by a qualified organization. This ensures the products will be disposed of in an environmentally sensitive manner. For additional information on used-oil recycling programs, please see the following:

- Saskatchewan – www.usedoilrecyclingsk.com
- Alberta – www.usedoilrecyclingab.com
- British Columbia – www.bcusedoil.com
- Manitoba – www.usedoilrecycling.com/en/mb

CONTACT INFO

For more information on this or any other CO-OP® lubricant product, please contact your local retail co-operative or Federated Co-operatives Limited.

petroadmin@fcL.crs • www.fuel.crs • www.agro.crs

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PREMIUM
LUBRICANTS



T-HF PLUS

TRANS-HYDRAULIC™

PRODUCT DESCRIPTION

T-HF PLUS is for OEM units that call for a single fluid for the transmission and hydraulics. Needing to be multi-functional, T-HF PLUS provides superior protection in a wide range of temperatures and conditions in a wide variety of industry-leading OEM equipment.

PERFORMANCE FEATURES

- Exceptional shear stability
- Extreme pressure protection
- Oxidative stability improves oil life
- Greater cold weather performance than conventional transmission hydraulics fluids.
- Enhanced aeration control
- Water emulsifying formula
- Fully compatible with factory fill products
- Superior wet brake and clutch defence

APPLICATIONS

T-HF PLUS has been designed for a range of transmission types, including CVT, gear and power-shift. It is also recommended for the protection and proper function of various other component systems such as hydraulics, differentials, final drives, power steering, power take-offs, wet brakes and wet clutches.

TECHNICAL PROPERTIES

The values listed below are typical of current production. As variations may occur, these numbers do not constitute a specification.

| PROPERTIES | TEST METHODS | T-HF PLUS |
|---|--------------|---------------|
| SAE Grade | — | 10W-30 |
| Kinematic Viscosity cSt @ 40°C | ASTM D445 | 54.8 |
| Kinematic Viscosity cSt @ 100°C | ASTM D445 | 9.3 |
| Viscosity Index | ASTM D2270 | 154 |
| Pour Point, °C | ASTM D97 | -45° |
| Brookfield Viscosity cP @ °C | ASTM D2983 | 3,520 @ -20° |
| | | 29,000 @ -35° |
| KRL Test @ 20 Hours, Viscosity, cSt @ 100°C | DIN 51350/6 | 8.6 |
| Sonic Shear Test @ 40mins, Viscosity, cSt @ 100°C | ASTM D5261 | 9.2 |

T-HF PLUS

TRANS-HYDRAULIC™

PERFORMANCE SPECIFICATIONS

T-HF PLUS is approved and/or recommended for use in the following:

| INDUSTRY/OEM | T-HF PLUS SPECIFICATIONS |
|----------------------|---|
| AGCO | POWER FLUID 821XL |
| ALLISON | C-4/C-3/C-2 |
| API | GL-4 |
| CASE IH | MS-1210/MS1209/MS-1207/ MS-1206/MS-1205/MS-1204 |
| CNH | MAT 3540/MAT 3505/MAT 3525/ MAT 3509 |
| EATON VICKERS | I-286-S/M-2950-S/35VQ25 |
| FORD | ESN-M2C134-D/ESN-M2C134- A/B/C/ESN-M2C86-B/C/ESN- MSC53-A/B/ESN-MSC43 |
| FORD NEW HOLLAND | FHNA-2-C-201.00 |
| JOHN DEERE | JDM J20C/JDM J20A/JDM J14B/ JD303 |
| KUBOTA | UDT |
| MASSEY FERGUSON | M-1145/M-1143/M-1141/M-1135/ M-1129A/M-1127 A/B /M-1110 |
| NEW HOLLAND | NH410B |
| PARKER DENISON | HF-2/HF-1/HF-0 |
| VOLVO | WB 101 |
| WHITE FARM EQUIPMENT | Q-1826/Q-1766/Q-1722/Q-1766B/ Q-1705/Q-1802/TYPE 55 |
| ZF TRANSMISSIONS | TE-ML 03E/TE-ML 05F/TE-ML 06K/ TE-ML 17E/TE-ML 21F |

PRODUCT SELECTION

Product availability can vary by location. Please contact your local retail Co-op for further details.

| PRODUCT SIZES | T-HF PLUS |
|---------------|-----------|
| 1 L Bottle | |
| 5 L Bottle | |
| 10 L Bottle | |
| 20 L Pail | ✓ |
| 110 L Drum | |
| 205 L Drum | ✓ |
| 1000 L Tote | ✓ |

SAFETY DATA SHEETS

Product-specific safety data sheets (SDS) can be obtained by contacting your local retail Co-op or Federated Co-operatives Limited (see contact information below) or by going online at www.fuel.crs.

RECYCLING OF USED LUBRICANTS AND CONTAINERS

Please protect the environment when disposing of petroleum products. All products should be taken to an authorized collection facility or picked up by a qualified organization. This ensures the products will be disposed of in an environmentally sensitive manner. For additional information on used-oil recycling programs, please see the following:

- Saskatchewan – www.usedoilrecyclingsk.com
- Alberta – www.usedoilrecyclingab.com
- British Columbia – www.bcusedoil.com
- Manitoba – www.usedoilrecycling.com/en/mb

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T-HF SYNTHETIC BLEND

TRANS-HYDRAULIC™

PRODUCT DESCRIPTION

T-HF SYNTHETIC BLEND is a superior synthetic blend, low-viscosity, heavy-duty trans-hydraulic fluid designed for equipment with a common oil system. The advanced additive package used in T-HF SYNTHETIC BLEND provides all-season performance and protection required for major transmission, hydraulics, differential, power steering and wet brake components.

PERFORMANCE FEATURES

- Extreme low temperature operation, down to -45°C
- Superior additive chemistry allows for extended service intervals
- Enhanced shear stability resists thinning to allow for greater component protection
- Friction modifiers reduce brake chatter and reduce slipping
- Excellent extreme pressure fortification
- Exceptional anti-rust formula safeguards major components

APPLICATIONS

T-HF SYNTHETIC BLEND is recommended as an all-season fluid that meets or exceeds major OEM specifications for year round use in equipment with a common oil system that controls the transmission, hydraulics, differentials, wet brakes, final drives, as well as power-steering and PTO systems.

TECHNICAL PROPERTIES

The values listed below are typical of current production. As variations may occur, these numbers do not constitute a specification.

| PROPERTIES | TEST METHODS | T-HF SYNTHETIC BLEND |
|---|--------------|----------------------|
| SAE Grade | — | 5W-30 |
| Kinematic Viscosity cSt @ 40°C | ASTM D445 | 46.4 |
| Kinematic Viscosity cSt @ 100°C | ASTM D445 | 9.4 |
| Viscosity Index | ASTM D2270 | 192 |
| Pour Point, °C | ASTM D97 | -54° |
| Brookfield Viscosity cP @ °C | ASTM D2983 | 1,386 @ -20° |
| | | 17,354 @ -40° |
| KRL Test @ 20 Hours, Viscosity cSt @ 100°C | DIN 51350/6 | 8.0 |
| Sonic Shear Test @ 40mins, Viscosity, cSt @ 100°C | ASTM D5261 | 9.0 |

T-HF SYNTHETIC BLEND

TRANS-HYDRAULIC™

PERFORMANCE SPECIFICATIONS

T-HF SYNTHETIC BLEND is approved and/or recommended for use in the following:

| INDUSTRY/OEM | T-HF SYNTHETIC BLEND SPECIFICATIONS |
|----------------------|--|
| AGCO | POWER FLUID 821XL |
| ALLISON | C-4/C-3/C-2 |
| API | GL-4 |
| CASE IH | MS-1210/MS-1209/MS-1207 |
| CNH | MAT 3540/MAT3526/MAT 3525/ MAT 3505/MAT 3509 |
| EATON VICKERS | I-286-S/M-2950-S/35VQ25 |
| FORD | ESN-M23C134D & ESN-M2C134-A/B/C/D |
| FORD NEW HOLLAND | FNHA-2-C-201.00 & FNHA-2-C-200.00 |
| JOHN DEERE | JDM J20C/JDM J20D/JDM J20B/ JDM J20A/JDM J14B/JD303 |
| KUBOTA | UDT |
| MASSEY FERGUSON | M-1145/M-1143/M-1141/M-1135/ M-1129A/M-1127A/B/M-1110 |
| NEW HOLLAND | NH410B |
| PARKER DENISON | HF-2/HF-1/HF-0 |
| VOLVO | WB 101 |
| WHITE FARM EQUIPMENT | Q-1826/Q-1766/Q-1722/Q-1766B/ Q-1705/Q-1802/TYP E 55 |
| ZF TRANSMISSIONS | TE-ML 03E/TE-ML 05F/TE-ML 06K/ TE-ML 17E/TE-ML 21F |

PRODUCT SELECTION

Product availability can vary by location. Please contact your local retail Co-op for further details.

| PRODUCT SIZES | T-HF SYNTHETIC BLEND |
|---------------|----------------------|
| 1 L Bottle | |
| 5 L Bottle | |
| 10 L Bottle | ✓ |
| 20 L Pail | ✓ |
| 110 L Drum | ✓ |
| 205 L Drum | ✓ |
| 1000 L Tote | ✓ |

SAFETY DATA SHEETS

Product-specific safety data sheets (SDS) can be obtained by contacting your local retail Co-op or Federated Co-operatives Limited (see contact information below) or by going online at www.fuel.crs.

RECYCLING OF USED LUBRICANTS AND CONTAINERS

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- Alberta – www.usedoilrecyclingab.com
- British Columbia – www.bcusedoil.com
- Manitoba – www.usedoilrecycling.com/en/mb

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T-HF WINTER FORMULA

TRANS-HYDRAULIC™

PRODUCT DESCRIPTION

T-HF WINTER FORMULA is a premium-performance, heavy-duty transmission, differential and hydraulic fluid designed for optimal cold weather performance. T-HF WINTER FORMULA is specifically designed to protect a variety of components on mobile equipment operating within the agriculture, forestry and construction industries.

T-HF WINTER FORMULA has been evaluated against the most recent specifications set by the industry's leading tractor and transmission manufacturers to ensure your equipment is protected at the highest level possible.

PERFORMANCE FEATURES

- Oxidation inhibitors resist thermal breakdown and oil thickening
- Ambient air temperature range of between -40°C and 28°C
- Corrosion inhibitors protect vital components from rust
- Extremely shear stable, allowing it to resist excessive thinning
- Meets and/or exceeds all major equipment manufacturer's gear protection requirements, including those intended for severe cold weather operation

APPLICATIONS

T-HF WINTER FORMULA is recommended for equipment outfitted with a common oil reservoir that operates the hydraulics, transmission, differential, final drive, wet brake, power steering and power take-off systems.

TECHNICAL PROPERTIES

The values listed below are typical of current production. As variations may occur, these numbers do not constitute a specification.

| PROPERTIES | TEST METHODS | T-HF WINTER FORMULA |
|---|--------------|---------------------|
| SAE | — | 5W-20 |
| Kinematic Viscosity cSt @ 40°C | ASTM D445 | 35.2 |
| Kinematic Viscosity cSt @ 100°C | ASTM D445 | 7.3 |
| Viscosity Index | ASTM D2270 | 179 |
| Pour Point, °C | ASTM D97 | -60° |
| Brookfield Viscosity cP @ °C | ASTM D2983 | 1,420 @ -20° |
| | | 16,418 @ -40° |
| Sonic Shear Test @ 40 min, Viscosity @ 100°C, cSt | ASTM D5261 | 6.8 |
| KRL Test @ 20 Hours, Viscosity @ 100°C, cSt | DIN 51350/6 | 6.8 |

T-HF WINTER FORMULA

TRANS-HYDRAULIC™

PERFORMANCE SPECIFICATIONS

T-HF WINTER FORMULA is approved and/or recommended for use in the following:

| INDUSTRY/OEM | T-HF WINTER FORMULA SPECIFICATIONS |
|----------------------|---|
| AGCO | POWER FLUID 821XL |
| ALLISON | C-4/C-3/C-2 |
| CNH | MAT 3525/3505 |
| CASE IH | MS-1210/MS-1209/MS-1207/ MS-1206/MS-1205/MS-1204 |
| FORD | ESN-M2C134-D/ESN-M2C134- A/B/C |
| FORD NEW HOLLAND | FNHA-2-C-201.00 |
| JOHN DEERE | JDM J20D |
| KUBOTA | UDT |
| MASSEY FERGUSON | M-1143/M-1141 |
| PARKER DENISON | HF-2/HF-1/HF-0 |
| WHITE FARM EQUIPMENT | Q-1826/Q-1722 |
| ZF TRANSMISSIONS | TE-ML-03E |
| OTHER MANUFACTURERS | BELARUS/DAVID BROWN/ EATON HYDRAULICS/IMT/ INTERNATIONAL HOUGH/KIOTO/ KOMATSU/DRESSER/LANDINI/ LEYLAND/McCORMICK FARMALL/ MITSUBISHI/SUNSTRAND HYDRAULICS/UNIVERSAL/ VALMET/YANMAR |

PRODUCT SELECTION

Product availability can vary by location. Please contact your local retail Co-op for further details.

| Product Sizes | T-HF WINTER FORMULA |
|---------------|---------------------|
| 1 L Bottle | |
| 5 L Bottle | |
| 10 L Bottle | |
| 20 L Pail | ✓ |
| 110 L Drum | |
| 205 L Drum | ✓ |
| 1000 L Tote | |

SAFETY DATA SHEETS

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RECYCLING OF USED LUBRICANTS AND CONTAINERS

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- Alberta – www.usedoilrecyclingab.com
- British Columbia – www.bcusedoil.com
- Manitoba – www.usedoilrecycling.com/en/mb

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