CO-OP® PREMIUM LUBRICANTS

T-HF

TRANSMISSION HYDRAULIC FLUIDS

T-HF (Trans-Hydraulic Fluid) products are high-quality premium performing heavy-duty transmission hydraulic fluid. Each product has been tested against the performance standards of industry-leading original equipment manufacturers. T-HF is designed for protection and performance of components in a variety of equipment that requires a single fluid for a common oil-reservoir system for transmissions, hydraulics, differentials, final drives, power steering, power-take-off systems, wet brakes and clutches.

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T-HF

TRANS-HYDRAULIC FLUID

PRODUCT DESCRIPTION

T-HF (Trans-Hydraulic Fluid) Is a high quality performing heavy-duty transmission hydraulic fluid. T-HF is designed for protection and performance of components in a variety of equipment with a common oil reservoir, requiring a single fluid for transmissions, hydraulics, differentials, final drives, power steering, power-take-off systems, wet brakes and clutches.

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

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T-HF

TRANS-HYDRAULIC FLUID

PERFORMANCE SPECIFICATIONS

T-HF is approved and/or recommended and backed by the Federated Co-operatives Limited Oil Guarantee for use in the following:

INDUSTRY/OEM	T-HF SPECIFICATIONS
AGCO	POWER FLUID 821 XL
ALLISON	C4/C3/C2
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-06K/TE-ML-05F/ TE-ML-03E/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
3.785 L Jug	✓
9.46 L Jug	✓
18.9 L Pail	✓
208 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 business.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.interchangerecycling.com
- Manitoba – www.usedoilrecyclingmb.com

CONTACT INFO

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CO-OP® PREMIUM LUBRICANTS

T-HF PLUS

TRANS-HYDRAULIC FLUID

PRODUCT DESCRIPTION

T-HF PLUS is a highly advanced, premium transmission hydraulic fluid that offers ultra-shear-stable performance and enhanced vital component protection in a wide variety of industry-leading OEM equipment. T-HF PLUS prevents permanent shear loss and fluid thinning, while providing superior protection in multiple temperature ranges and conditions.

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

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 FLUID

PERFORMANCE SPECIFICATIONS

T-HF PLUS is approved and/or recommended and backed by the Federated Co-operatives Limited Oil Guarantee 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
18.9 L Pail	✓
208 L Drum	✓
1000 L Tote	✓

SAFETY DATA SHEETS

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CO-OP® PREMIUM LUBRICANTS

T-HF SYNTHETIC BLEND

TRANS-HYDRAULIC FLUID

PRODUCT DESCRIPTION

T-HF SYNTHETIC BLEND is all-season premium performing transmission hydraulic fluid formulated to provide superior performance in extreme temperatures. The enhanced additive package provides optimal balance of overall performance and protection that resists thermal breakdown, helping to maintain fluid durability. T-HF SYNTHETIC BLEND is a low-viscosity, heavy-duty transmission hydraulic fluid designed for equipment with a common oil reservoir system that operates a variety of 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 as an all-season premium performing fluid that meets and/or exceeds major OEM specifications for year round use in equipment with a common oil system required for major transmission, hydraulics, differentials, final drives, power steering, power-take-off systems, wet brakes and 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 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 and backed by the Federated Co-operatives Limited Oil Guarantee for use in the following:

INDUSTRY/OEM	T-HF SYNTHETIC BLEND SPECIFICATIONS
AGCO	POWER FLUID 821XL
ALLISON	C4/C3/C2
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-M23C134-D & 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/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 SYNTHETIC BLEND
9.46 L Jug	✓
18.9 L Pail	✓
208 L Drum	✓
1000 L Tote	✓

SAFETY DATA SHEETS

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RECYCLING OF USED LUBRICANTS AND CONTAINERS

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CO-OP® PREMIUM LUBRICANTS

T-HF WINTER

TRANS-HYDRAULIC FLUID

PRODUCT DESCRIPTION

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

T-HF WINTER 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 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
SAE	—	5W-20
Kinematic Viscosity cSt @ 40°C	ASTM D445	34
Kinematic Viscosity cSt @ 100°C	ASTM D445	7.2
Viscosity Index	ASTM D2270	183
Pour Point, °C	ASTM D97	-51°
Brookfield Viscosity cP @ °C	ASTM D2983	1,300 @ -20°
		18,000 @ -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

TRANS-HYDRAULIC FLUID

PERFORMANCE SPECIFICATIONS

T-HF WINTER is approved and/or recommended and backed by the Federated Co-operatives Limited Oil Guarantee 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
18.9 L Pail	✓

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