

# **Bio-Fleet Trans-Hydraulic (Universal Tractor Fluid)**

Bio-Fleet™ Trans-Hydraulic Fluid is a readily biodegradable biosynthetic-blend universal tractor fluid designed to perform in agricultural, construction, and industrial equipment requiring multifunctional transmission-hydraulic fluids. This high-performance fluid provides excellent wet brake frictional characteristics, oxidative stability, and protection in synchronized and glide shift transmissions. Formulated with proprietary Stabilized™ technology and frictional modifiers, it exceeds performance requirements for UTTOs and MTOs across leading OEM specifications.

#### **Benefits**

- Readily biodegradable, environmentally non-toxic, not bioaccumulative
- Superior wet brake chatter control
- Excellent cold temperature performance
- Enhanced oxidation and thermal stability
- Compatible with standard UTF and OEM systems
- Protects against wear, rust, oxidation, and foaming
- Reduces oil thickening and deposit formation
- Environmentally friendly, zinc-free formula
- Exceeds EPA EAL guidelines for aquatic toxicity

#### **Application / New Filling**

- Suitable for equipment using UTF in hydraulics, transmissions, final drives, PTOs, and wet brakes
- Ford, New Holland, CNH, Massey-Ferguson, John Deere, Kubota, Case IH, Agco, and more
- For best results, contact Renewable Lubricants, Inc. for changeover instructions prior to initial fill

### **Specifications and Approvals**

- Allison C-3, C-4
- Caterpillar TO-2
- API GL-4
- FZG Stage 12
- John Deere J20C, J14A/B/C
- CNH MAT 3525
- Massey-Ferguson M1135, M1141, M1139, M1143, M1145
- Ford M2C134-D, M2C86-C, M2C134-C/B/A

- Kubota UDT
- JIC-145/MS-1210, MS-1204 to MS-1209
- Agco, White Farm, Deutz-Allis, Landini, Fiat-Hesston
- Meets EPA 2013 VGP for EALs/ OECD 301B, ASTM D-5864
- USDA Biobased & BioPreferred Certified



## **Typical Specifications**

Viscosity @ 100°C ASTM D-445	10.26			
Viscosity @ 40°C ASTM D-445	47.8			
Viscosity Index ASTM D-2270	210			
Brookfield Viscosity ASTM D-2983				
@-20°C	1,650			
@-35°C	21,150			
Flash Point, °C (ASTM D-92)	251°C			
Pour Point, °C (ASTM D-97)	-39°C			
Rust Prevention A&B, (ASTM D-665)	Pass Clean			
Acid Number, mg KOH/g (ASTM D-974)	0.6			
Dielectric Strength (ASTM D-877)	46 KV			
Four Ball Wear (ASTM D-4172)				
1 h, 65°C, 1500 rpm, 40 kg,	0.36			
Biodegradability CEC-L33A93	>80%			
OECD 301B	>60%			
ASTM D-5864	>60%			
Energy Conserving Formulation – USDA Biobased and BioPreferred				

Availability F.O.B.: Hartville, Ohio, USA	1 Gallon	5 Gallon	Drum	Totes	Bulk
RLI Product Item #	81203	81204	81206	81207	81209