

## 251 Universal ATF

### Automatic Transmission Fluid

**DESCRIPTION:**

Universal ATF No. 251 is a new and versatile multi-functional power transmission fluid which satisfies the needs of most automotive, industrial, and marine markets. In addition to worldwide passenger car automatic transmission requirements, Universal ATF meets and exceeds all industrial powershift transmission requirements for heavy equipment and all hydraulic pump manufacturers' requirements for industrial hydraulic oils and hydrostatic drive fluids.

**COMPOSITION:**

Universal ATF is a carefully balanced formulation of highly refined base oils and additives which combine both superior anti-wear performance and clutch plate friction retention characteristics with oxidation and corrosion inhibitors for exceptional thermal stability and protection against rust and corrosion.

**PERFORMANCE  
CHARACTERISTICS:**

Universal ATF is formulated to meet and exceed the performance requirements for DEXRON®-II, particularly the severe THCT (Turbo-Hydramatic Cycling Test).

In 1980, Ford Motor Company completed conversion to new automatic transmission designs requiring M2C138-CJ (friction-modified) fluids replacing Type F fluids for factory-fill. DEXRON®-II was subsequently approved as an alternative for service fill of these transmissions. Ford started production of a new automatic transmission, the C-5, incorporating a lock-up torque converter in early 1981. It was determined that the M2C138-CJ fluids did not provide adequate friction retention. A new specification, M2C166-H (Type H), describes the performance required. M2C166-H is similar to M2C138-CJ but also includes the Allison C-3 friction retention test. Universal ATF is formulated to meet and exceed this Type H requirements and is recommended for service-fill of the Ford C-5 transmission.

The new Allison C-4 Specification replaces C-3 and describes a hydraulic transmission fluid recommended for use in industrial torque converters and powershift transmission in off-highway equipment. The Allison C-3 Specification was developed in 1977 to replace the C-2 Specification. A critical, high-energy friction retention test requirement must be met in addition to several other tests for Type C-3 and C-4. For the first time a single fluid exceeding both DEXRON®-II and Allison C-3/C-4 can be recommended for all Detroit-Diesel/Allison automatic and powershift transmissions and industrial torque converters.

Universal ATF is formulated to also meet and exceed the Caterpillar TO-2 Specification's performance requirements for all Caterpillar powershift transmissions.

Universal ATF is formulated to meet and exceed the severe piston and vane pump wear test requirements of the Denison HF-0 Specification as well as the Vickers Standard and High Pressure Vane Pump Tests and the Sundstrand Axial Piston Pump Wear/Water Stability Test.



# PRIMROSE PLUS

## 251 Universal ATF Automatic Transmission Fluid

### USES:

Power transmission through the use of hydraulic fluids is accomplished in a variety of complex mechanical designs. This diversity of specialized equipment designs has resulted in a variety of lubricant specifications, creating an ever-increasing number of relatively small volume products.

#### Universal Automatic Transmission Fluid 251 offers:

- Reduction in distributing and inventorying a number of specialized hydraulic fluid types and viscosity grades.
- Reduction in the risk of misapplication of fluids resulting in customer dissatisfaction or equipment failure.
- Reduction in additive storage costs.
- Increased profitability from the capability of single universal power transmission fluid for the following fluid requirements:

#### Automatic Transmission Fluid

- DEXRON®-II
- Mercon®
- Ford Type F
- Ford M2C138-CJ
- Ford M2C166-H (Type H)
- Daimler- Chrysler 236.6

#### Powershift Transmission Fluid

- Detroit Diesel/Allison Type C-4
- Caterpillar TO-2

#### Hydraulic Fluid

- Denison
- Sperry Vickers
- Sundstrand

### APPLICATIONS:

- Passenger car automatic transmissions
- Truck automatic transmissions
- Off-highway construction, agricultural and mining equipment
- Mobile hydraulic systems
- Industrial applications
- Marine hydraulics

### TYPICAL SPECIFICATIONS:

Gravity, API	32.0
Viscosity, SUS @ 100°F	180
Viscosity Index	156
Flash COC °F	350
Pour, °F	-35
Color	Red