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Syn-O-Gen Universal ATF

Synthetic Automatic Transmission Fluid

DESCRIPTION:

Syn-O-Gen Universal ATF No. 751 is a new and versatile multi-functional power transmission fluid which satisfies the need of automotive, industrial and marine markets. In addition to worldwide passenger car automatic transmission requirements, Syn-O-Gen 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:

Syn-O-Gen Universal ATF No. 751 is a carefully balanced formulation of pure synthetic 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:

Syn-O-Gen Universal ATF No. 751 is formulated to meet and exceed the performance requirements for DEXRON®-II, particularly the severe THCT (Turbo-Hydrumatic 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 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. Syn-O-Gen Universal ATF 751 is formulated to meet and exceed this Type H requirement and is recommended for service-fill of the Ford C-5 transmission.

During the 1970's, DEXRON®-II fluids became the standard for service-fill in North American produced automatic transmissions. The situation is quite different with European automatic transmission manufacturers, especially for factory-fill. Daimler-Benz has continued to accept only a specific DEXRON®-type additive which has provided the necessary shift feel and friction retention characteristics. Syn-O-Gen Universal ATF No. 751 chemistry has been evaluated with results comparable to this specific DEXRON®-type fluid in the DKA friction test, 10,000 cycle endurance test and vehicle shift feel retention tests with both asbestos and non-asbestos containing friction materials. Thus, Syn-O-Gen ATF No. 751 is a fluid which may also be used in Mercedes Benz cars.

The new Allison C-4 Specification replaces C-3 and describes a hydraulic transmission fluid recommended for use in industrial torque converters and powershift transmissions in off-highway equipment. The Allison C-3 Specification was developed in 1977 to replace the C-2 Specification because available fluids did not provide adequate friction retention with graphitic clutch plates commonly used in Allison powershift transmissions. 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.

Syn-O-Gen Universal ATF No. 751 is formulated to also meet and exceed the Caterpillar TO-2 Specification's performance requirements for all Caterpillar powershift transmissions.

Syn-O-Gen Universal ATF No. 751 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.



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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.

Syn-O-Gen Universal ATF No. 751 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.
- Increased profitability from the capability of single universal power transmission fluid for the following fluid requirements:

Automatic Transmission Fluid

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

Powershift Transmission Fluid

- Detroit-Diesel/Allison Type C-2,C-3,C-4
- Caterpillar TO-2

Hydraulic Fluid

- Denison
- Sunstrand
- Sperry Vickers

APPLICATIONS:

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

TYPICAL SPECIFICATIONS:

Gravity, API	35
Flash COC °F	350
Viscosity, SUS 100° F	210
Pour, °F	-40
Viscosity Index	175
Color	Red