



Product Data Sheet

ESSO ATF D/M

ALLISON C4 Transmission Fluid

December 2006

ESSO AUTOMATIC TRANSMISSION FLUID D/M is a premium multipurpose fluid offering excellent low temperature fluidity, high temperature stability and wear protection:

- ◆ Suitable for older GM and Ford vehicles
- ◆ Recommended for most automatic, powershift, hydrostatic and many standard transmissions
- ◆ Excellent multi-purpose hydraulic fluid
- ◆ Contains highly refined base stocks and selected additives to meet the demanding high and low temperature requirements of modern transmissions

Primary Applications

Automatic Transmissions

Esso ATF D/M is suitable for many older GM and Ford vehicles as well as older European and Asian imports such as found in the following table.

Older Models of the following makes may be suitable.

G. M.	Fiat	Mazda*	Suzuki
Ford*	Honda	Mercedes*	Toyota
AMC	Infiniti	Nissan	Volvo*
Acura	Isuzu	Peugeot	VW
Audi	Jaguar*	Porsche	Alfa Romeo
BMW	Jeep	Saab	

*Check dipstick or owner's manual for product to use. For transmissions specifying Ford M2C-33F (Type F) use Esso Type F ATF.

Power Shift/Hydrostatic Transmissions

Esso ATF D/M is suitable for use in:

- ◆ Power shift and hydrostatic transmissions and drives specifying Allison C4 or Caterpillar TO-2.
- ◆ Detroit Allison V700 series including V730D

Manual Transmissions

Esso ATF D/M is recommended for many light duty manual transmissions. It is also excellent as a winter grade in many heavy duty manual transmissions specifying SAE 10W, 20W-20, or 5W-20 engine oils because of its excellent low temperature fluidity and anti-wear properties.

Hydraulics

Esso ATF D/M is recommended for most hydraulic systems using vane, gear and piston pumps including Vickers, Racine, Denison, Sundstrand and others where older ATF technology is recommended.

Performance Features

Good Wear Protection

Provides excellent anti-wear performance in both transmission and hydraulic service.

Extended Fluid Life

The use of highly refined base oil and potent oxidation inhibitors retard the rate of fluid breakdown in high temperature service.

Corrosion Control

Provides protection against rusting and corrosion.

High Viscosity Index

Retains adequate lubricating film thickness for severe high temperature service with excellent fluidity at low temperatures.

Reduced Foam

Contains an effective anti-foam agent for both transmission and hydraulic service.

Seal Compatibility

Optimized seal swell agents to provide excellent compatibility with modern, high temperature seal materials as well as those used in older transmissions.

Lubricating Characteristics

Helps in providing quiet operation, smooth shifting and excellent wear protection.

Proper Viscosity

Transmission of power is smooth and efficient throughout all normal temperature ranges.

Good Low Temperature Flow

To ensure needed fluidity at start-up, especially for modern electronically controlled automatic transmissions.

Controlled Volatility

Minimizes fluid loss through vaporization.

Easily Recognized

Contains a red dye to distinguish between transmission fluid and engine oil.

Servicing

The draining and refilling of automatic transmissions should be done with care. The procedures outlined by the vehicle manufacturer in the service manual or the Esso Car Care Guide should be followed.

Viscosity

Esso ATF D/M is available in one grade. Compared to SAE 5W-20 engine oils and SAE 75W-80W gear oils, it has about the same high temperature viscosity with approximately a 5°C fluidity advantage in the low temperature operating range.

Low Temperature Performance

For trouble-free operation of power shift, hydrostatic and automatic transmissions at low temperatures, a Brookfield Viscosity of 100 Poise should not be exceeded. Manual transmissions can operate with fluid viscosities as high as 1000 Poise, but for ease of gear shifting in cold weather, a 500 Poise viscosity is more desirable.

Precautions

Esso ATF D/M is manufactured from high quality petroleum base stocks, carefully blended with selected additives. As with all petroleum products, good personal hygiene and careful handling should always be practiced. Avoid prolonged contact to skin, splashing into the eyes, ingestion or vapour inhalation. Please refer to our ESSO Material Safety Data Sheet for further information.

Note: This product is not controlled under Canadian WHMIS legislation.

Typical Properties

Property	
Density, kg/m ³	850
Flash Point, °C	180
Colour	red
Pour Point, °C	-48
Kinematic Viscosity, cSt @ 40°C	34
cSt @ 100°C	7.2
Brookfield Viscosity cP @ -40°C	17,000
cP @ -30°C	3,300
cP @ -20°C	1,000

The values shown above are representative of current production. Some are controlled by manufacturing and performance specifications while others are not. All may vary within modest ranges.