DATA BULLETIN



## 100% Synthetic DCT Fluid

Dual-clutch transmissions (DCTs) are automatic transmissions based on the architecture of manual transmissions. The complex system essentially consists of two manual transmissions in the same housing. As one clutch is engaged, the other readies the next appropriate gear, minimizing the interruption of power and improving performance and efficiency. A specially formulated fluid is required to maintain the high-performance output of these advanced transmissions. AMSOIL 100% Synthetic DCT Fluid is designed to protect high-tech dual-clutch transmissions during the most intense, high-heat operating conditions. It provides the fast, smooth shifts drivers expect.

### **Excellent Friction Durability**

Dual-clutch transmissions are capable of seamless, split-second shifts but can suffer from shudder or lurching at slow speeds. AMSOIL 100% Synthetic DCT Fluid is engineered to prevent shudder in sophisticated dual-clutch transmissions. Its frictional properties provide superior protection and consistently produce fast, smooth shifts. Synthetic DCT Fluid's exceptional durability ensures stability in stop-and-go traffic. It promotes stable synchronizer engagements, extending the life of the transmission.

### **Outstanding Wear Protection**

AMSOIL Synthetic DCT Fluid resists the extreme heat in today's high-temperature DCTs to provide complete protection for gears, bearings and other vital parts. Its high film strength and anti-wear/extreme-pressure additives are specifically designed to protect the metal surfaces of DCTs.

### **Resists Heat and Oxidation**

Maintaining proper viscosity at extreme temperatures is crucial to protect the components of a dual-clutch transmission. AMSOIL Synthetic DCT Fluid provides complete protection during the intense conditions native to high-performance sports sedans and supercars.

### **Superior Shear Stability**

Transmission fluid can shear at the molecular level as it passes between gear teeth. This leads to reduced viscosity and decreased wear protection. AMSOIL Synthetic DCT Fluid resists shear and provides consistent viscosity, even in the extreme stress of high-horsepower, high-torque applications.



- Outstanding wear protection
- Excellent performance in extreme heat and cold
- **Designed** to prevent shudder

# TYPICAL TECHNICAL PROPERTIES 100% SYNTHETIC DCT FLUID (DCT)

Kinematic Viscosity @ 100°C, cSt (ASTM D445)	7.7
Kinematic Viscosity @ 40°C, cSt (ASTM D445)	38.8
Viscosity Index (ASTM D2270)	171
Pour Point °C (°F) (ASTM D97)	58 (-72.4)
Flash Point °C (°F) (ASTM D92)	230 (446)
Fire Point °C (°F) (ASTM D92)	244 (471.2)
Four-Ball Wear Test (ASTM D4172B @ 40 kg, 75°C, 1200 rpm, 1 hr), Scar, mm	0.41
Brookfield Viscosity @ -40C, cP (ASTM D2983)	8822

### **APPLICATIONS**

Use in dual-clutch transmissions that require any of the following specifications:

BMW\* 83 22 2 148 578, 83 22 2 148 579, 83 22 0 440 214, 83 22 2 147 477, DCTF-1, MTF-LT-5 • Chrysler\* 68044345 • Citroen/ Peugeot\* 9734.S2 • Ferrari/Shell\* TF DCTF-3 • Fiat\* BOT 341 • Ford\* WSS-M2C-936-A • Mercedes Benz\* 236.21, 236.25 • Mitsubishi\* Dia-Queen SSTF-I • Nissan\* GT-R\* Transmission Oil R35 Special • Pentosin\* FFL-2, FFL-3, FFL-4 • Porsche\* 999.917.080.00, 043 207 29, 043 207 30, 000 430 20 • Renault\* BOT 450 • Volvo\* 1161838, 1161839 • VW/Audi\* G 052 182, G 052 529, TL 521 82

### **SERVICE LIFE**

AMSOIL 100% Synthetic DCT Fluid should be changed according to your vehicle manufacturer's recommendations.

### **WARRANTY**

AMSOIL products are backed by a Limited Liability Warranty. For complete information visit www.amsoil.com/warranty.aspx.

#### **HEALTH & SAFETY**

This product is not expected to cause health concerns when used for the intended applications and according to the recommendations in the Safety Data Sheet (SDS). An SDS is available via the Internet at www.amsoil.com or upon request at (715) 392-7101. **Keep Out of Reach of Children.** Recycle used oil and bottle.

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