

DCTF dual clutch transmission oil

● Performance Overview

MaxTop DCTF Dual-Clutch Transmission Fluid is a high-performance lubricant specially developed for dual-clutch transmission (DCT) systems. It is designed for its unique working mechanism (two sets of clutches work alternately) and harsh working conditions. Precise friction control: By optimizing the friction coefficient, it ensures the rapid engagement and disengagement of the clutch plates, avoids gear shifting jerks or slippage, and guarantees seamless power transmission. Extreme heat dissipation efficiency: The high thermal conductivity formula quickly absorbs and disperses the high temperature of the clutch (the peak temperature can reach over 150°C), preventing performance degradation or component damage caused by thermal attenuation.

● Features

01

It has excellent friction improvement performance and outstanding shear stability

02

Maintains stable friction characteristics

03

Reduces the operating resistance of the transmission system

04

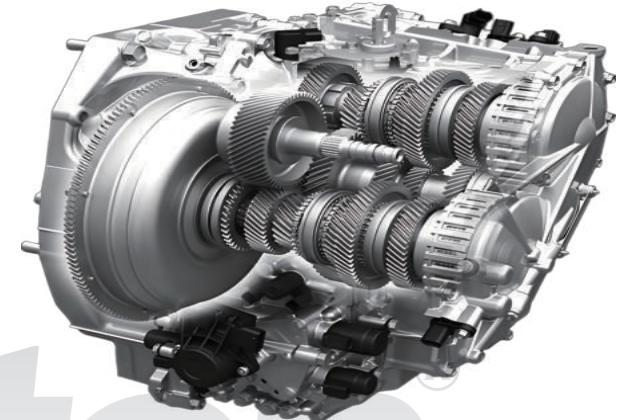
Ensures smooth speed shifting of the vehicle under various harsh environments

05

significantly improves the effectiveness of oil changes

06

comprehensively protects the transmission, and ensures efficient power output



● Application Scenario

1: High-performance models in the passenger car field: Suitable for vehicles equipped with dual-clutch transmissions, such as sports cars and coupe sedans (e.g., Porsche PDK, Audi S-Tronic), supporting high-load scenarios like launch control and track driving.

2: Family and business models: Suitable for the frequent gear-shifting needs in congested urban traffic, optimizing low-speed smoothness and reducing jerks and abnormal noises.

3: Hybrid and new energy models: Compatible with the DCT system of plug-in hybrid (PHEV) models, coping with the high-torque impact when the motor and engine work together to ensure the stability of the electric drive system.

4: Special driving environments: In high-temperature and high-humidity areas: Prevent oil oxidation and performance degradation caused by clutch overheating.

5: Mountainous and hilly roads: Maintain the response speed of the hydraulic system under continuous gear-shifting conditions to avoid power interruption. In extremely cold regions: Quickly build up oil pressure at -30°C to ensure smooth cold starts.

DCTF dual clutch transmission oil performance indicators

Project	Quality indicators
appearance	Clear and bright
Kinematic viscosity (100°C), mm ² /s	7.00~7.50
Brinell viscosity (-40°C), mPa·s is not greater than	13000
Moisture, %(mass fraction) is not greater than	0.1
Flash point (opening), °C is not lower than	190
Pour point, °C is not higher than	-45
Copper corrosion test (150°C, 3h), grade not greater than	2a
Liquid phase corrosion test	rustless
Evaporation loss	
Noach method (200°C, 1h), %(mass fraction)	
Not more than	10
The change value of the distributed viscosity (-40°C) after evaporation loss is not greater than mPa.s	2000
Cleanliness, grade	-/17/14
Foam property (foam tendency/foam stability)/ (mL/mL)	
Procedure I(24 ° C) is not greater than	50/0
Procedure II (93.5°C) is not greater than	50/0
Procedure III (post 24°C) is not greater than	50/0
150°C is not greater than	150/0
Oxidation stability	
40°C kinematic viscosity change rate, % is not greater than	20
Acid value added value, mg (KOH) /g is not greater than	2.0
Copper, steel sheet appearance	No paint film
Shear stability (60°C, 20h)	
Kinematic viscosity at 100°C, mm ² /s is not less than	6.0

Maxtop®