

DCTF双离合变速箱油

●性能概述

迈斯拓DCTF双离合变速箱油是专为双离合变速箱（DCT）系统研发的高性能润滑油，针对其独特的工作机制（两组离合器交替工作）和严苛工况设计。精准摩擦控制：通过优化摩擦系数，确保离合器片快速接合与分离，避免换挡顿挫或打滑，保障动力传输无缝衔接。极致散热效率：高导热配方快速吸收并分散离合器高温（峰值温度可达150°C以上），防止热衰减导致的性能下降或部件损伤。超强抗剪切稳定性：在高速齿轮啮合与高油压环境下保持黏度稳定，避免油膜破裂，延长油液使用寿命。低粘度高流动性：兼顾低温冷启动保护（-35°C流动性）与高温润滑需求，减少动力损耗，提升燃油经济性。抗腐蚀与清洁性：抑制金属氧化和油泥生成，保护精密电磁阀、液压控制单元及同步器，维持系统清洁与响应灵敏性。

●产品特点

01

湿式/干式离合器兼容配方：针对湿式双离合变速箱（如大众DSG、福特Power-Shift）提供定制化摩擦特性，平衡润滑与摩擦需求。适配干式双离合系统（需与独立齿轮油配合使用），避免油液污染离合器组件。

02

全合成纳米技术：采用PAO全合成基础油与纳米级抗磨添加剂，在齿轮与轴承表面形成致密保护层，降低磨损率达40%以上。

03

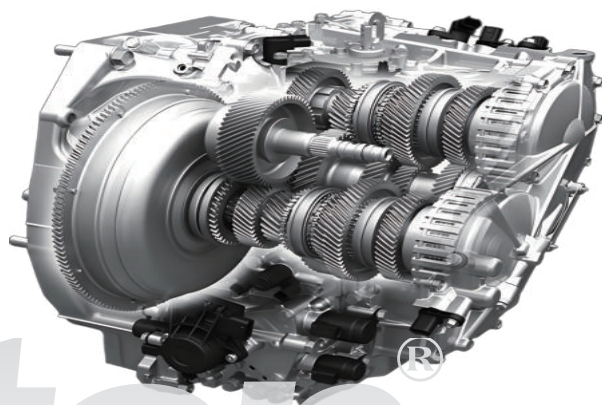
高温耐久性：通过150°C连续高温台架测试，抗氧化性能提升50%，保障激烈驾驶或频繁启停工况下的长效保护。

04

广泛兼容性：符合主流OEM标准（如大众、福特、奔驰等），适配欧系、美系、韩系等品牌DCT变速箱。

05

环保节能设计：低硫、低灰分配方，兼容GPF/DPF后处理系统，满足国六排放标准，助力车辆绿色运行。



●应用场景

- 1.乘用车领域高性能车型：适配跑车、轿跑等搭载双离合变速箱的车辆（如保时捷PDK、奥迪S-Tronic），支持弹射起步、赛道驾驶等高负荷场景。
- 2.家用及商务车型：适用于城市拥堵路况下的频繁换挡需求，优化低速平顺性，减少顿挫与异响。
- 3.混动与新能源车型：兼容插电混动（PHEV）车型的DCT系统，应对电机与发动机协同工作的高扭矩冲击，保障电驱系统稳定性。
- 4.特殊驾驶环境：高温高湿地区：防止离合器过热导致的油液氧化和性能衰减。
- 5.山地与多坡道路：连续换挡工况下保持液压系统响应速度，避免动力中断。极寒地区：-30°C低温下快速建立油压，确保冷启动顺畅。
- 6.改装与赛事车辆：支持涡轮增压、ECU调校等动力强化改装后的变速箱负荷需求，耐受高转速、大扭矩输出环境。

●执行标准

企业标准Q/59207764-1.23-2017

DCTF双离合变速箱油性能指标

项目	质量指标	试验方法
外观	清澈并光亮	目测
运动粘度(100℃), mm ² /s	7.00~7.50	GB/T 265
布氏粘度(-40℃), mPa·s 不大于	13000	GB/T 11145
水分, %(质量分数)不大于	0.1	GB/T 260
闪点(开口), °C不低于	190	GB/T 3536
倾点, °C不高于	-45	GB/T 3535
铜片腐蚀试验(150℃, 3h), 级 不大于	2a	GB/T 5096
液相锈蚀试验(蒸馏水)	无锈	GB/T 11143
蒸发损失 诺亚克法(200℃, 1h), %(质量分数) 不大于	10	NB/SH/T 0059
蒸发损失后布氏黏度(-40℃)改变值, mPa.s 不大于	2000	GB/T 11145
清洁度, 等级	-/17/14	GB/T 14039
泡沫性(泡沫倾向/泡沫稳定性)/ (mL/mL) 程序I(24℃) 不大于 程序II(93.5℃) 不大于 程序III(后24℃) 不大于 150℃ 不大于	50/0 50/0 50/0 150/0	GB/T 12579 SH/T 0722
氧化安定性 40℃运动粘度变化率, % 不大于 酸值增加值, mg (KOH) /g 不大于 铜, 钢片外观	20 2.0 无漆膜	JIS K2514
剪切安定性 (60℃, 20h) 100℃运动粘度, mm ² /s 不小于	6.0	NB/SH/T 0845



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

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Reduces the operating resistance of the transmission system

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significantly improves the effectiveness of oil changes

02

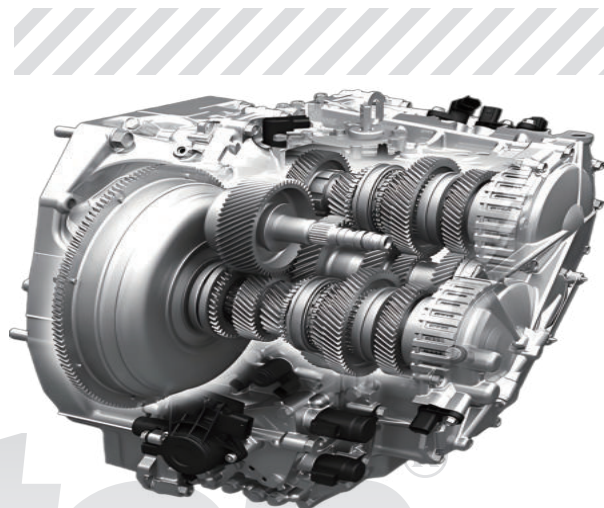
Maintains stable friction characteristics

04

Ensures smooth speed shifting of the vehicle under various harsh environments

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 Procedure II (93.5°C) is not greater than Procedure III (post 24°C) is not greater than 150°C is not greater than	50/0 50/0 50/0 150/0
Oxidation stability 40°C kinematic viscosity change rate, % is not greater than Acid value added value, mg (KOH) /g is not greater than Copper, steel sheet appearance	20 2.0 No paint film
Shear stability (60°C, 20h) Kinematic viscosity at 100°C, mm ² /s is not less than	6.0