

MOTUL TEKMA ULTIMA 5W-30 LS FE



Heavy Duty Diesel Engine Oil Fully synthetic Low SAPS – Low HTHS – Fuel Economy

TYPE OF USE

TEKMA ULTIMA 5W-30 LS FE is a synthetic high-performance mixed-fleet engine oil which has been specially developed for the latest generation of diesel engines meeting Euro I to VI stage emission standards. It is suitable for on- and off-highway applications where an API FA-4 lubricant is specified by the manufacturer.

This top-tier lubricant maximizes fuel economy while providing exceptional wear and oxidation control, contributing to durability and extended drain intervals.

Thanks to its Low SAPS-technology (with low levels of Sulphated Ash, Phosphorus and Sulphur), **TEKMA ULTIMA LS FE 5W-30** protects engines fitted with after-treatment systems such as diesel particulate filters (DPF) and other emission regulating systems (EGR, SCR and catalysts).

PERFORMANCES

STANDARDS ACEA F01-24

API FA-4/SN JASO DH-2

APPROVALS CATERPILLAR ECF-3

CUMMINS CES 20087

DAIMLER DTFR 15C130 (former MB 228.61)

MACK EOS-5

RENAULT TRUCKS RVI RLD-5

VOLVO VDS-5

PERFORMANCES DETROIT DIESEL DFS93K223

FORD WSS-M2C214-B1

The 2024 **ACEA** Oil Sequences introduce a new engine oil category, **F01**, which has specific viscosity requirements distinct from the existing E11-24 oil specifications. This addition aligns with manufacturers' efforts to enhance fuel efficiency and meet the latest Euro VI emission standards.

Furthermore, the **F01** category aims to meet high-temperature and shear stability demands for engines using biodiesel blends.

We retain the right to modify the general characteristics of our products in order to offer to our customers the latest technical development.



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API FA-4 specific oils are formulated for use in on-highway applications with diesel fuel sulfur content up to 15 ppm. They are blended to a high temperature high shear (HTHS) viscosity range of 2.9cP-3.2cP to assist in reducing GHG emissions. These oils are especially effective at sustaining emission control system durability where particulate filters and other advanced after-treatment systems are used.

API FA-4 oils are neither interchangeable nor backward compatible with API CK-4, CJ-4, Cl-4 with Cl-4 PLUS, Cl-4, and CH-4 oils.

JASO DH-2 describes a low sulphated ash oil designed for the lubrication of Heavy Duty Diesel Engines, particularly when equipped with exhaust after treatment devices.

Cummins CES 20087 is a low SAPS lubricant specification designed for use in high performance medium- and heavy-duty diesel engines where advanced aftertreatment systems such as Diesel Particulate Filters (DPFs) are fitted.

With a HTHS viscosity of 2.9-3.2cP, these lubricants are designed to provide enhanced fuel economy in select engine models including newer on-highway X12 and X15 on-highway engines. Cummins engines that require this lubricant specification would typically align with Euro VI emissions standards in Europe and EPA GHG 2016 in North America.

Daimler DTFR 15C130 (formerly MB 228.61) is a Top Tier low SAPS lubricant specification designed for use in high performance medium and heavy-duty diesel engines where advanced aftertreatment systems such as Diesel Particulate Filters (DPFs) are fitted. With a HTHS viscosity of 2.9-3.2cP, these lubricants are designed to provide enhanced fuel economy benefits to the latest Daimler OM471A Euro VI engines.

Detroit Diesel DFS93K223 covers the FA-4 engine oils with an emphasis on fuel-economy improvements.

The **Ford WSS-M2C214-B1** is a specification issued by Ford Motor Company for SAE 5W-30, API FA-4 low-viscosity diesel engine oil, primarily intended for use in modern Ford diesel engines, especially the 3.0 L PowerStroke in F-150 and Super Duty models.

Volvo developed the **VDS-5** specification to help improve the fuel economy of its engines and explore the possibility of longer drain intervals. Oils meeting the VDS-5 spec, or the comparable EOS-5 specification for Mack and RLD-5 for Renault trucks, are formulated with a powerful additive package to help prevent oil degradation caused by oxidation.

VDS-5 / EOS-5 / RLD-5 oils are suitable only for 2021 GHG and newer fuel-efficient Volvo D13 / Mack MP 8 / RENAULT TRUCKS 13L EURO VI Step-D engines. These oils are not backwards compatible for use in older engines.



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RECOMMENDATIONS

Due to its low HTHS (High Temperature High Shear) viscosity, this oil can only be used in compatible engines. Please consult the manufacturer's recommendations for more information.

Oil change: As per the manufacturer's recommendations.

We strongly advise strictly adhering to the oil change intervals specified by the manufacturer.

We also recommend the use of an oil monitoring program to optimize oil change intervals and maximize equipment protection.

PROPERTIES

| Г | Color | ASTM D1500 | Scale 6.0 (amber) |
|---|----------------------------|------------|---------------------|
| ' | Viscosity grade | SAE J 300 | 5W-30 |
| | Density at 20°C (68°F) | ASTM D1298 | 0.855 |
| | Viscosity at 40°C (104°F) | ASTM D445 | 60.8 mm²/s |
| | viscosity at 100°C (212°F) | ASTM D445 | 10.2 mm²/s |
| | Viscosity Index | ASTM D2270 | 156 |
| | Pour point | ASTM D97 | -42.0 °C / -44.0 °F |
| | Sulfated Ash | ASTM D874 | % weight 0.97 |
| | TBN | ASTM D2896 | 9.8 mg KOH/g |
| L | Flash point | ASTM D92 | 218 °C / 424 °F |