



MN TS-23 UHPD 5W-30 7123

Innovative energy-saving synthetic (contains PAO) low-viscosity engine oil developed for the latest generation of turbocharged diesel engines operating under severe conditions, using ultra-low sulphur fuel (15 ppm or less) and equipped with exhaust gas aftertreatment systems: SCR, EGR and DPF. Provides engine protection in accordance with EPA 2010 and GHG 17. Developed to meet the requirements of Volvo and Daimler.

Product properties:

- Improves fuel economy (up to 0.5 % compared to 10W-30 oils and up to 1.3 % compared to 15W-40 oils) and has extended change interval due to increased shear stability and very low volatility;

- The unique low-viscosity synthetic base of the highest quality, combined with a unique additive package and viscosity modifiers, provides an increased viscosity index and unrivalled anti-friction, anti-wear and anti-scuffing properties, which significantly extends the service life of machinery in all, even the most extreme, operating modes in a wide enough range of ambient temperatures and provides unrivalled shear stability;

- The synthetic base, special surfactants and TBN-busters give the oil increased thermal oxidation stability, excellent detergent-dispersing properties and low ash content, which effectively reduces carbon and lacquer formation, prevents the formation of deposits of all kinds and keeps engine separate parts, especially the cylinder-piston group, perfectly clean throughout the entire interval between changes;

- Due to a low viscosity PAO-containing base it has excellent low-temperature properties, including a low pour point, which provides excellent oil pumpability and engine components turnability at low temperatures, easy "cold start" (down to -45 °C) and reduced starting wear;

- Effectively protects engine separate parts from all types of corrosion;

- Effectively prevents the increase of shear force during operation caused by viscosity increase due to soot dispersion;

- Maintains the efficiency of exhaust gas aftertreatment systems over a long period of time, extends their service life and reduces losses caused by clogging of diesel particulate filters (DPF).

Designed for engines of 2021 and later versions installed in on-road (long-haul tractors, buses, etc.), off-road (construction, mining, agricultural) and special-purpose vehicles of European, American and Asian manufacturers meeting Euro VI and EPA 10 requirements where API FA-4 performance level is required. Oils of this category are not interchangeable and backwards compatible with oils of CK-4 category and its predecessors. Can be used in light diesel engines and in diesel engines without diesel particulate filters (DPF).

Specifications

SAE 5W-30 API CK-4 ACEA E4-22 ACEA E7-22 **ACEA E8-22** ACEA E11-22 JASO DH-2 JASO DH-1 JASO DL-0 DAIMLER 15C120 (MB228.52) MB 228.51 MB 228.31 MAN M 3777 MAN M 3677 MAN M 3775 MAN M 3477 MAN M 3271-1 SCANIA LDF-4 MTU Category 3.1 and Category 2.1 VOLVO VDS-4.5 MACK EOS-4.5 **RENAULT RLD-4** CATERPILLAR ECF-3 CUMMINS CES 20086 CUMMINS CES 20081 DETROIT DIESEL DFS 93K222 DETROIT DIESEL DFS 93K218 DAF Extender Drain **Approval**

Recommendation VOLVO VDS-5

PACKAGING

MN7123-20 MN7123-IBC MN7123-DR