

## **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