



## MANNOL TS-18 15W-40 CK-4

7118

All-weather synthetic motor oil for heavy-duty and high-speed diesel engines of the latest generation with and without turbocharger, operating in severe conditions on low sulphur fuel. Designed specifically to protect machinery and benefit most out of it regardless of operating conditions.

## Product properties:

- An innovative additive package in combination with the highest quality synthetic base, featuring optimal viscosity in a wide temperature range, provides unrivaled anti-friction, anti-wear and anti-scuffing properties, which significantly extend the life of equipment in all, even the most extreme, operating modes in a wide range of ambient temperatures and provides significant fuel savings;
- Phenol and amine antioxidants in combination with a synthetic base of the latest generation provide the highest thermal oxidative stability to the oil, which, in combination with excellent detergent-dispersant properties and low ash content, effectively reduces scaling and varnish formation, prevents deposits of all kinds and maintains engine parts, especially cylinder-piston, in perfectly clean condition throughout the entire interval between replacements;
- A unique formulation provides exceptional oil resistance to aging, and due to the reduced evaporation and high flash point, it reduces oil scaling "waste", which enables it to be used in engines with a long life interval up to 100,000 km and conventional motors:
- Due to the synthetic base, the optimal viscosity has excellent low-temperature properties, including a low pour point, along with good oil pumpability and crankability of engine components at low temperatures, easy "cold start" (up to -30 °C) and reduced startup wear;
- Compatible with all exhaust gas after-treatment systems, DPF, TWC, EGR and SCR thanks to the use of Low SAPS technology;
- Effectively protects engine parts from all types of corrosion;
- Reduced foaming and effective resistance to aeration:
- Effectively deals with the increase in shear stress during operation caused by elevated viscosity due to soot dispersion.

Suitable for engines using fuelled by natural gas (LNG) and petroleum (LPG) gas.

Designed for all types of heavy duty diesel motors (long distance trucks, buses, etc.), off-road machinery (construction, mining, agricultural) and special equipment from European, American and Asian manufacturers that meet the requirements of Euro I – V and VI where a performance level of CK-4 or lower is required.

When using CK-4 oils with fuels containing more than 15 ppm sulphur, make sure to follow the recommendations of the engine manufacturer for service intervals.

Can be used in gasoline engines where API SL or lower performance is

required.

## **Specifications**

SAE 15W-40

API CK-4

ACEA E8

ACEA E11

MB 228.31

MB 228.51

VOLVO VDS-4.5

**CUMMINS CES 20086** 

MAN M 3775

IVECO (ACEA E6-2016)

DAF (ACEA E6-2016)

DETROIT DIESEL DDC93K222

**RENAULT RLD-3** 

MACK EOS-4.5

CATERPILLAR ECF-3

## **PACKAGING**

10L	MN7118-10	Plastic
1000L	MN7118-IBC	Pallet tank
208L	MN7118-DR	Drum
20L	MN7118-20	Plastic
60L	MN7118-60	Drum