



## MANNOL TS-17 UHPD 5W-30 Blue 7117

Energy-saving synthetic (PAO-based) motor oil for heavy duty and high-speed diesel engines of the latest generation with and without turbocharging, 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:

- The unique low-viscosity synthetic PAO-containing base of the highest quality, with ideal viscosity in the required temperature range, combined with an innovative additive package, provides unrivaled anti-friction, anti-wear and anti-scuffing properties, which significantly extends the life of the equipment in all, even the most complicated, modes works in a fairly wide range of ambient temperatures and offers significant fuel savings;
- The synthetic base and special TBN boosters provide increased thermal oxidative stability, excellent detergent-dispersant properties (TBN > 10) to the oil and simultaneously low ash content, effectively reducing the formation of scaling and varnish, preventing deposits of all kinds and maintaining perfect engine parts, especially the cylinder-piston group, throughout the entire service period between replacements;
- A unique formulation provides 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 90,000 km and conventional motors;
- Due to the PAO-containing base, the lower viscosity has perfect 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 -35 °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;
- 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.

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 requirements where the performance level of ACEA E8/E11 is mandatory.

Not recommended for use where SCANIA LDF-3 specification is required.

### Specifications

SAE 5W-30  
API CK-4  
ACEA E8  
ACEA E11  
VOLVO VDS 4.5  
CUMMINS CES 20086  
MAN M 3677  
IVECO (ACEA E6-2016)  
DAF (ACEA E6-2016)  
DETROIT DIESEL DDC93K222  
SCANIA LDF-4  
RENAULT RLD-3  
MACK EOS-4.5  
CATERPILLAR ECF-3

### Approval

DAIMLER DTFR 15C110

### PACKAGING

	MN7117-5		
1000L	MN7117-IBC	Pallet tank	
208L	MN7117-DR	Drum	
60L	MN7117-60	Drum	
20L	MN7117-20	Plastic	
5L	MN7117-5	Plastic	