



## MANNOL TS-10 UHPD 5W-40 7110

The universal all-season synthetic engine oil for modern high-load and high-speed diesel engines with and without turbocharging, operating in harsh conditions and at low ambient temperatures.

Product properties:

- A state-of-the-art additive package combined with a synthetic base of the highest quality, which has an ideal viscosity over a wide temperature range, provides unsurpassed anti-friction, anti-wear and extreme pressure properties, which significantly extends the service life of equipment in all, even the most extreme, operating modes in a wide range of ambient temperatures and provides significant fuel savings;
- The synthetic base provides good thermal-oxidative stability, which in combination with excellent detergent - dispersing properties (TBN >12.5 to 15.2) and low ash content (on average 1.3%) effectively reduces carbon and varnish formation, prevents the formation of deposits of all types and maintains exceptional cleanliness of engine parts, especially the cylinder-piston group, throughout the entire interval between replacements;
- Modern formulation provides oil resistance to aging, and due to low evaporation and high flash point reduces oil consumption "on the burn", which allows it to be used in engines with an extended oil change interval (Long Life more than 45,000 km) and conventional;
- It has excellent low-temperature properties, including a low pour point, which provides excellent oil pump ability and cranking of engine components at low temperatures, easy "cold start" (-35 °C and below) and reduced starting wear;
- Compatible with EGR and SCR systems, not suitable for systems equipped with particulate filters (DPF);
- Effectively protects engine parts from all types of corrosion;
- Has a reduced foaming;
- Effectively combats the increase in shear forces during operation caused by an increase in viscosity due to soot dispersion;
- Can be used when working on fuel with a high sulfur content.

It is intended for all types of high-load diesel engines of highway (mainline tractors, buses, etc.), off-road (construction, mining, agricultural) and special equipment of European, American and Asian manufacturers that meet the requirements of Euro I, II, III, IV, V, where the level of performance properties CI-4 or lower is required.

It can be used in gasoline engines where the API SL or lower performance level is required.

**Specifications**

SAE 5W-40

**Recommendation**

API CI-4/SL

ACEA E7

ACEA E4

MB 228.5

MACK EO-N

MTU Type 3

MAN M 3277

RENAULT RLD-2

VOLVO VDS-3

**PACKAGING**

20L	MN7110-20	Plastic	
1000L	MN7110-IBC	Pallet tank	
208L	MN7110-DR	Drum	