



## MANNOL TS-1 SHPD 7101

Innovative all-weather mineral-synthetic (esters + HC-synthes) motor oil for modern heavy duty and high-speed diesel engines with and without turbocharging, operated in difficult conditions. Designed specifically to protect machinery and benefit most out of it regardless of operating conditions.

Product properties:

- Ester components in combination with the top quality mineral-synthetic base provide good anti-friction and anti-wear characteristics, which significantly extend the life of scenery compared to similar oils in all, even the most extreme, operating modes and simultaneously guarantee significant fuel savings.
- Compared with counterparts, has higher thermal oxidation stability which, in combination with excellent detergent-dispersant properties (TBN > 10) effectively reduces the formation of scaling and varnish, prevents deposits of all kinds and maintains engine parts very clean throughout the service between replacements;
- A unique ester-containing formulation provides oil resistance to aging, meanwhile, by reducing evaporation it reduces oil scaling "waste", which enables it to be used in engines with an long life interval and conventional motors;
- Due to the content of esters, it features good low-temperature properties, including a low pour point, along with good oil pumpability and crankability of engine components at low temperatures, easy cold start and reduced startup wear;
- Effectively protects engine parts from all types of corrosion;
- Can be used in combination with few all with higher sulphur content.

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, II, III, IV where a performance level of CH-4 or lower is required.

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

SAE 15W-40  
API CH-4/SL  
ACEA E7  
ACEA A3/B4  
MAN M 3275  
MB 228.3  
MB 229.1  
MTU DDC Type 2  
VOLVO VDS-2

## PACKAGING

5L	MN7101-5	Plastic	
1000L	MN7101-IBC	Pallet tank	
208L	MN7101-DR	Drum	
60L	MN7101-60	Drum	
20L	MN7101-20	Plastic	
10L	MN7101-10	Plastic	