


# MANNOL TS-2 SHPD 20W-50

## 7102

Special multi-season, highly alloyed mineral engine oil with the addition of hydrosynthetics for modern, heavy duty and high-speed diesel engines with and without turbocharging, operating in extremely difficult conditions (including, at high ambient temperatures) and for engines with high mileage. Designed specifically to protect equipment and benefit most out of it under extreme loads.

Product properties:
- The highly viscous mineral-synthetic base of the highest quality provides good anti-friction and anti-wear properties, significantly extends the service life of equipment compared to counterpart oils in the most extreme operating modes;
- 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;
- Unique dispersant additives effectively support soot particles in suspension;
- Perfectly compatible with all types of gasketing, and has a low tendency to leakage even when worn, thanks to the high viscosity base;
- Contains components that prevent oxidation and deposition of contaminants on the pistons and O-rings; completely removed from the cylinder walls by oil control rings, which, in combination with low evaporation, significantly reduces oil waste due to scaling even on worn engines and allows it to be used in engines with long life and ordinary oils;
- The use of thickening additives of the latest generation not prone to degradation allows maintaining the required viscosity throughout the entire period between replacements;
- 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. Highly recommended for heavy duty tracked vehicles.
Can be used in gasoline engines where API SL or lower performance is required.

**Specifications**
SAE 20W-50
**Recommendation**
API CH-4/SL
ACEA E7
ACEA A3/B4
MAN M 3275-1
MB 228.3
MB 229.1
MTU Type 2
VOLVO VDS-2

## PACKAGING

| | | | |
|---|---|---|---|
| 5L | MN7102-5 | Plastic | |
| 1000L | MN7102-IBC | Pallet tank | |
| 208L | MN7102-DR | Drum | |
| 60L | MN7102-60 | Drum | |
| 20L | MN7102-20 | Plastic | |
| 10L | MN7102-10 | Plastic | |
| | MN7102-7 | | |
| 7L | MN7102-7 | | |