MANNOL TS-4 SHPD 15W-40

7104

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. The oil complies with the Global Specification GLOBAL-DHD-1, which takes into account all the requirements of European, American and Japanese manufacturers for heavy diesel engines manufactured since 1998, operating in the most difficult conditions with increased mileage between oil changes that comply with current standards for the content of toxic substances in exhaust gases and installed on heavy vehicles (more than 3.9 tons).

Product properties:
- Ester components in combination with the highest quality mineral-synthetic base that meets GLOBAL DHD-1 requirements, featuring optimal viscosity in a wide temperature range, provide excellent anti-friction, anti-friction and anti-wear 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;
- The ester components in combination with natural antioxidants provide increased thermal oxidative stability to the oil, which, in combination with excellent detergent-dispersant properties (TBN> 10) and low ash content, effectively reduces the formation of scaling and varnish, prevents deposits of all kinds and maintains engine parts 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 up to 45,000 km interval and conventional motors;
- Due to the ester-containing base, the optimal viscosity has excellent low-temperature properties, low pour point, along with good oil pumpability and crankability of engine components at low temperatures, easy “cold start” (up to -30 ºC) 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 CI-4 Plus or lower is required.
Can be used in gasoline engines where API SL or lower performance is required.

Specifications
SAE 15W-40
API CI-4 Plus
API CI-4/CH-4/SL
ACEA E7
ACEA A3/B4
JASO DH-1
GLOBAL DHD-1
Approval
Recommendation
CATERPILLAR ECF-2
CATERPILLAR ECF-1-a
CUMMINS CES 20076
CUMMINS CES 20077
CUMMINS CES 20078
DETROIT DIESEL 93K215
MACK EO-N
MACK EO-M Plus
MAN M 3275-1
MB 228.1
MB 228.3
MTU Type 2
RENAULT RLD-2
VOLVO VDS-3

PACKAGING

5L	MN7104-5	Plastic	
1000L	MN7104-IBC	Pallet tank	
208L	MN7104-DR	Drum	
60L	MN7104-60	Drum	
20L	MN7104-20	Plastic	
10L	MN7104-10	Plastic	
7L	MN7104-7		
1L	MN7104-1	Plastic	20 pcs/box
7L	MN7104SNI-7		
1000L	MN7104AR-IBC	Pallet tank	