



## MANNOL M.O. SAE 10W 3101

A special highest-quality monograde (winter) mineral engine oil for medium-load diesel-powered engines with and without a turbocharger operating under various conditions at ambient temperatures more than -30 °C. It was designed especially for VOLVO and CATERPILLAR equipment that requires the presence of corresponding specifications.

Product properties:

- Due to the absence of viscosifiers, it is less susceptible to destruction and ageing than analogous all-season oils, it has an extended expected life which, when combined with a low evaporation ability that reduces oil consumption through burning, allows using it in engines with an extended oil replacement age;
- A highest-quality mineral base and thoroughly selected additives ensure excellent antifriction and antiwear properties that significantly extend the expected life of the equipment in comparison with oil analogues in all operation modes;
- In contrast with analogues, it has an enhanced thermal and thermo-oxidising stability due to natural antioxidants that, when combined with excellent cleaning-dispersing properties that reduce the formation of carbon deposits and lacquer, prevent the formation of deposits of all types and maintain engine parts clean throughout the entire time between replacements;
- It has good low-temperature properties, including a low freezing point that would ensure an excellent oil pumping quality and the cranking ability of engine subsystems at low temperatures, an easy “cold start” (up to -30 °C) and the reduction of the startup wear;
- It effectively protects engine parts from all types of corrosion;
- It may be used when operating on fuel with an increased sulphur content.

It is meant for diesel-powered engines of passenger cars, light trucks, trucks, construction, mining and agricultural equipment, boats, locomotives, as well as stationary equipment. It is suitable for retro-vehicles.

It may be used as hydraulic oil in hydraulic systems including the ones that are combined with mechanic gearboxes or torque converters if the manufacturer requires the use of motor oil of a specific-grade viscosity in these subsystems.

**Specifications**

SAE 10W

**Approval****Recommendation**

API CH-4

MIL L 2104 C

CATERPILLAR Series 3

DAVID BROWN DB OM 616

MACK EO-J

VOLVO B20

**PACKAGING**

208L

MN3101-DR

Drum

1000L

MN3101-IBC

Pallet tank