

MANNOL Motor Doctor + Ester

9943

Innovative multifunctional engine protectant by stabilising the pressure in the lubrication system – an additive for engine oils based on synthetic esters (Group V oils). It is a complex product: a viscosity stabiliser protecting the oil from liquefaction, a sealant of the engine lubrication system and a friction modifier. It is suitable for all types of four-stroke engines – diesel and petrol engines and all types of oils – synthetic, semi-synthetic, mineral, including those containing esters.

Properties:
- Replaces the loss of kinematic viscosity (at 100 °C) during operation (especially with frequent cold starts) without reducing the low-temperature properties;
- Increases the viscosity index;
- Reduces cylinder compression loss by improving the dynamic seal between the piston and cylinder, thereby reducing operating consumption by preventing oil from entering the combustion chamber;
- Eliminates micro leaks caused by mechanical wear of engine separate parts by adding modifiers causing blockage of these leaks;
- Penetrates into worn seals and rubber sealings, restores their former volume and elasticity, preventing oil leakage through them;
- Contains API SN/CG-4 additive package;
- Increases oil film thickness;
- Reduces oil volatility, which also reduces operational consumption and extends the oil's service life;
- Increases the thermal-oxidative stability, which increases its resistance to ageing and degradation so that oil change intervals can be extended;
- Improves low-temperature properties, which greatly facilitates cold starts and reduces engine starting wear;
- Improves detergent and dispersant properties, prevents deposits of lacquers, resins and sludge, which increases engine and oil service life.

The ester molecules found in the additive are magnetised to metal surfaces due to their distinct polarity and create a dense and very strong oil film, which has:
- the highest load-carrying capacity which allows the engine to work under increased loads without negative consequences;
- unsurpassed antiwear and antifriction properties which significantly increases engine durability and saves fuel;
- anticorrosive and antioxidant properties.

Compatible with all materials.
Compatible with all types of exhaust gas aftertreatment systems.
Contains fluorescent dye for leak detection.

Application: Add to the oil in a ratio of 100 ml per 1 L of oil.
Recommended for regular use.

PACKAGING

	MN9943-045PET		
350ml	MN9943-035BY		