



ASTRIS DIESEL SYNTHECO

SAE 5W-30 - Fully Synthetic

Latest generation high-performance diesel motor oil with low ash content, especially suitable for EURO V and EURO VI truck motors

New fully-synthetic engine oil for heavy duty truck diesel engines, with special "Economic & Ecologic" additive technology and friction reduction system.

The increasing cost of diesel, the introduction of the new EURO VI norms, as well as generally growing legislative requirements concerning the reduction of emissions, are leading to an increase in the demand for diesel engine oils of the newest generation.

For this reason, modern diesel engine oils must guarantee fuel saving (Fuel Economy), as well as increased protection of the engine and the ever more complex exhaust after-treatment systems (EGR, SCR and DPF).

Properties and features

FUEL ECONOMY

To achieve a reduction in fuel consumption and emissions, the diesel engine market will develop also for the heavy duty sector more and more in the direction of lower viscosity grades.

"Best in class" with fuel consumption reduction results*: Independent tests have proved that the use of this engine oil leads to an average reduction of fuel consumption of about 3.3%**.

EXHAUST EMISSION PROPERTIES

The EURO VI norms stipulate that harmful emissions such as micro particles [P.M.] and nitrogen oxide [NOx] are set to a "zero emission level".

These tighter norms require the introduction of new utility vehicles which use more and more complex exhaust after-treatment systems.

In comparison to standard engine oils, with this product the phosphorus emissions are reduced by about 60%, therefore the risk of catalytic converter poisoning in SCR and DPF systems is minimised.

DURABILITY

Modern engines work with higher exhaust gas circulation flows, more advanced turbochargers and alternative fuels (e.g., bio diesel) whose interactions have a decisive effect on the durability of the engine oil.

ACEA E6 + E9: ULTIMATE PROTECTION

The qualities of an ACEA E6 oil guarantee high quality and protection. With the simultaneous fulfilment of ACEA E9, the protection levels against corrosion and wear, soot carrying capacity and the avoidance of oxidative thickening are additionally increased.

Use

Particularly recommended for utility vehicles with modern exhaust after-treatment systems. Specially developed for EURO V and EURO VI diesel engines, this product can also be used in older engines, with or without particle filter or other exhaust gas treatment systems.

This engine oil is also suitable for the use in CNG gas engines in utility vehicles and buses (see specifications).

Observe manufacturer's specifications and instructions before use.

* tested against a conventional SAE 10W-40 engine oil according to OM501LA (Fuel Economy Test).

** tested against a SAE 15W-40 CJ-4 low SAPS engine oil, according to EPA SmartWay SAE J1321 Protocol



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Specifications / Performance level

ACEA E9, E7, E6	MACK-EO-O Premium-Plus, EO-N Premium-Plus,
API CJ-4, CI-4, CH-4, CG-4, CF-4 / SN	MACK EO-M Premium-Plus
MB 228.51	DEUTZ DCQ IV-10 LA
MB 235.28	CATERPILLAR ECF-3, ECF-2, ECF-1a
MAN M 3677	CUMMINS CES 20081
MAN M 3477	JASO DH-2
MTU Typ 3.1	VOITH Oil Class B
VOLVO VDS-4, VDS-3	<u>CNG (compressed natural gas engines):</u>
SCANIA LDF-4	RENAULT TRUCK RGD
RENAULT VI RXD, RLD-3, RLD-2	MAN 3271-1
	VOLVO CNG

Technical data

	Unit	Method
Density at 15°C	0,856 g/cm ³	ASTM D 1298
Viscosity at 40 °C	69 mm ² /s	ASTM D 445
Viscosity at 100 °C	11.5 mm ² /s	ASTM D 445
Viscosity index	165	ASTM D 2270
Viscosity at – 30°C (CCS)	6000 cP	ASTM D 5293
HTHS Viscosity at 150°C	3.5 cP	ASTM D 5293
TBN	10.0 mgKOH/g	ASTM D 2896
Sulphated ash	< 1.0 % mass	ASTM D 874
Flash point C.O.C.	216 °C	ASTM D 92
Pour point	- 48 °C	ASTM D 97
NOACK evaporation loss	11.5 % mass	CEC-L-40-A-93

Health, safety and environment

ADR / SDR : Not dangerous

EU Waste List Code : 13 02 08