

PALLAS 2000

ECO U.H.P.D. 100% SYNTHETIC LUBRICANT FOR LOW EMISSION ENGINES WITH
DIESEL AND FUEL ECONOMY

120068/08.24

Rev. 7

DESCRIPTION & APPLICATIONS

PALLAS 2000 5W30 is a so-called "Fuel ECO" oil, which meets the most stringent requirements of the latest 4-stroke diesel engines in transport and public works, particularly in terms of emissions and fuel economy and increases the drain intervals.

PALLAS 2000 5W30 is particularly suitable for engines with DPF (diesel particle filter) requiring a SAE 5W30 (RENAULT, MERCEDES, MAN) and is specially formulated to meet the latest emission standards EURO VI and TIER 4.

PALLAS 2000 5W30 allows, in particular, optimum fuel savings (of the order of 1 liter per 100 km), compared to SAE 15W40 grade oils.

PALLAS 2000 5W30 allows, under normal analytical control, drain intervals up to 150 000 km (according to the manufacturer's requirements), even under intensive service conditions.

Approvals

MB DTFR 15C110

MB DTFR 15C120

Mack EOS-4,5

MAN M 3677

Renault VI RLD-3

Scania LDF-4

Volvo VDS 4,5

ADVANTAGES

- Excellent thermal stability that facilitates cold start.
- Improved ventilation control (ability to release air that is entrained in the oil).
- Better oxidation stability at high temperatures resulting in longer intervals between oil changes.
- Shear stability ensures the conservation of its SAE 5W30 grade over time.
- PALLAS 2000 5W30 offers excellent protection against wear resulting in:
 - High pistons cleanliness,
 - Remarkable protection against polishing of the cylinder liners.
- PALLAS 2000 5W30 also allows fuel savings of 1.3% compared to an ACEA E7 15W40 oil (Mercedes OM 501LA FE test).

PALLAS 2000

PERFORMANCES

Satisfies to the following specifications:

ACEA E7-16/E8-22/E11-22
API CK-4/SN
CATERPILLAR ECF-3
CUMMINS CES 20086
DAF PSQL 2,1 E LD
Detroit Diesel 93K222
DEUTZ DQC IV-18 LA
DTFR 15C100 / MB228,31
DTFR 15C110 / MB228,51
DTFR 15C120 / MB228,52
Ford WSS-M2C213-A
JASO DH-2
MACK EOS-4.5
MAN M 3271.1/3477/3775/3677
MTU TYPE 3.1
Renault IV RLD-3
RVI RLD-3
SCANIA Low Ash
SCANIA LDF-4
Volvo VDS 4.5
Voith retarder oil Class B

ENVIRONMENT, HEALTH & SAFETY

Please consult also the Safety Data Sheet about how to manipulate and to stock the product as well as to learn about the first aid measurements in case of accident.

Elimination after use must be made in conformity with the local rules in force about used oils disposal.

When needed, Safety Data Sheet can be obtained upon request.

PALLAS 2000

PROPERTIES

CHARACTERISTICS	UNITS	METHODS	TYPICAL DATA
SAE grade	-	-	5W30
Density at 15 °C	kg/l	ASTM D4052	0,850
Kinematic viscosity at 40°C	mm²/s.	ASTM D445	66,4
Kinematic viscosity at 100°C	mm²/s.	ASTM D445	11,3
Viscosity index	-	ASTM D2270	166
Dynamic viscosity at -30°C	mPa.s	ASTM D 5293	4929
Flash point (PMCC)	°C	ASTM D 93	220
Pour point	°C	ASTM D97	-42
Sulphated ash content	% weight		0,79
Phosphorous content	m%	ASTM D 5185	0,066
Sulphur content	m%	ASTM D 5185	0,18
Noack evaporation loss	% weight	CEC-L-40-T-87	12,4
TBN (Total Base Number)	mg KOH/g	ASTM D 2896	8,7

The average values are given for information only.