



PALLAS LD-5 MS 5W20

ULTRA FUEL ECO U.H.P.D. VERY HIGH PERFORMANCE LUBRICANT



INDUSTRIAL VEHICLE RANGE

ENGINE

SAE 5W-20

STANDARDS AND SPECIFICATIONS

MAN 3977

SCANIA LDF-5

Full synthetic

Engine cleanliness

Oxidation resistance

Shear stability

APPLICATIONS

PALLAS LD-5 MS 5W20 is a low-viscosity FUEL ECO oil that meets the most stringent requirements of the latest 4-stroke diesel engines by SCANIA and MAN using advanced exhaust gas post-treatment systems.

PALLAS LD-5 MS 5W20 is compatible with recent MAN EURO VI d D26, D38 and D26LOH and SCANIA DC13 engines.

ADVANTAGES

- Excellent thermal stability for easier cold starts
- Ensures maximum engine protection against wear, keeps pistons clean and prevents liner polishing
- Enhanced oxidation protection, allowing for extended oil drain intervals
- Low SAPS content, protecting post-treatment systems and contributing to reduced pollutant emissions
- Better fuel economy thanks to reduced internal friction due to its low HTHS viscosity.

PERFORMANCES

APPROVALS ⁽¹⁾ | SCANIA LDF-5

(1) Certificate available on request

PERFORMANCE LEVELS | MAN M3977

Do not use **PALLAS LD-5 MS 5W20** in older engines requiring higher ash formulations or other specifications (e.g. ACEA E7/E9 conventional) without validation.

CHARACTERISTICS

CHARACTERISTICS	UNITS	METHODS	AVERAGE VALUES
Density at 20°C	-	NF EN ISO 12185	0.848
Kinematic viscosity at 40°C	mm ² /s	NFT 60-100	45.5
Kinematic viscosity at 100°C	mm ² /s	NFT 60-100	8.05
Viscosity index	-	NFT 60-136	151
CCS at -30°C	mPa.s	ASTM D 5293	5,305
Pour point	°C	NFT 60-105	-42
Flash point	°C	NFT 60-118	224
Sulphated ash content	% weight	NFT 60-143	0.25
NOACK	% weight	CEC L-40-A-93	11.8
TBN	mg KOH/g	ASTM D 2896	14.1
H.T.H.S	mPa.s	ASTM D4683	2.7

Average characteristic values are provided for information purposes only

HEALTH, SAFETY AND ENVIRONMENT

Disposal must comply with applicable regulations pertaining to the disposal of used oils.

Store in a location sheltered from weather