

4296.83

Goldenstar LA Plus

SAE 5W-30

LOW S.A.P.S. technology, fully synthetic lubricant for all on/off-road Heavy-Duty Diesel engines.

PAKELO GOLDENSTAR LA PLUS SAE 5W-30 is a fully synthetic lubricant specific for all on/off-road Heavy Duty Diesel engines.

The product provides the following characteristics:

- use of selected high quality synthetic base stocks for a better thermal stability
- high detergent properties to maintain engine clean in working conditions
- high dispersant properties to avoid deposit and sludge agglomeration in working conditions and to maintain correct viscosity of the product during warming up phase
- adequate anti-corrosion, anti-wear and anti-foam properties
- high resistance to oxidation and to carbon residues formation, even under high working temperatures
- low volatility that reduces oil losses caused by evaporation
- easy and safe start-ups (even at very low temperatures) and high reliability during standard engine working conditions (at every climatic condition)
- specific Low S.A.P.S. technology: the use of exclusive additives with low content of Sulphated Ash, Phosphorous and Sulphur allows to extend working life of all post-treatment devices present in latest generation engines. it satisfies also MID S.A.P.S. technology requirements
- HT-HS value optimized for severe and specific needs of modern Heavy-Duty Diesel engines
- Fuel Economy performance compared to higher Viscosity Grade lubricants
- high-performance profile to meet requirements of the great part of circulating vehicles

Oil drain intervals are usually specified by OEMs and/or on-board electronic devices of latest generation vehicles.

Their recommendations should be taken into consideration to guarantee engine reliability.

PAKELO GOLDENSTAR LA PLUS SAE 5W-30 is perfectly compatible with all the lubricants that have the same application. However, we recommend to avoid mixing it with other products for not undermining its exceptional properties.

4296.83

Goldenstar LA Plus

SAE 5W-30

Application fields

PAKELO GOLDENSTAR LA PLUS SAE 5W-30 is a high-performance lubricant recommended for all on/off-road Heavy-Duty Diesel engines also working under severe conditions.

Furthermore, thanks to synthetic base stocks used and to the low ash content, the product can also be used for CNG (Compressed Natural Gas) engines

Performance levels

ACEA E11 / E9 / E8 / E7 / E6 / E4, **API** CK-4 / CJ-4 / CI-4 Plus / CI-4 / CH-4, **JASO** DH-2 / DH-1, **Caterpillar** ECF-3, **Cummins** CES 20.086 / 20.081, **Detroit Diesel** 93K222 / 93K218, **Deutz** DQC IV-18LA, **Mack** EOS-4.5, **MAN** M3271-1 / M3477 / M3775 / M3677 / M3777, **MB** 228.52 / 228.51 / 228.31, **MTU** Type 3.1 / Type 2.1, **Renault** RVI RLD-4 / RLD-3, **Scania** LDF-4, **Volvo** VDS-4.5.

Approvals

MAN M3677 / M3775, **MB**-Approval 228.51, **Scania** LDF-4.

Pakelo Recommendations

IVECO 18-1804 Class TLS E6.

Chemical-Physical Characteristics

Goldenstar LA Plus	Method analysis	Unit measure	Value SAE 5W-30
Density at 15°C	ASTM D1298	kg/l	0,853
Kinematic Viscosity at 40°C	ASTM D445	cSt	71,6
Kinematic Viscosity at 100°C	ASTM D445	cSt	12,0
Viscosity Index	ASTM D2270	-	165
C.C.S. Viscosity at -30°C	ASTM D5293	cP	6.200
HT-HS Viscosity at 150°C / 10 ⁶ s ⁻¹	ASTM D4683	cP	3,60
T.B.N. (Total Base Number)	ASTM D2896	mg(KOH)/g	13,0
Sulphated Ash	ASTM D874	% (w/w)	0,95
Flash Point (C.O.C.)	ASTM D92	°C	210
Pour Point	ASTM D97	°C	-39
Noack evaporability test	ASTM D5800	% (w/w)	10,6

The data just above refer to average values and must not be understood as guaranteed characteristics.

This Technical Data Sheet has been carefully checked to guarantee complete and precise information. However, we do not take any responsibility in case of damages caused by any mistakes or omissions. Due to continual product research and development, the information contained herein is subject to change without notification.