



# Peregrine

## Additives & Lubes

### **PAL MAXX PLUS**

Last Revision: 25/07/19

#### **Super High Performance Synthetic Diesel Engine Oils**

#### **Description**

PAL MAXX PLUS meets the latest API CK-4 standard. PAL MAXX PLUS diesel engine oils are formulated with the latest additive package and premium quality synthetic base stocks to meet 2017 model year on-highway and Tier 4 non-road exhaust emissions standards as well for previous model year diesel engines. PAL MAXX PLUS diesel engine oils are formulated to meet the needs of the new generation low emission diesel engines operating on low-sulfur fuel, as well as those older engines running on high sulfur diesel.

#### **Performance Standards**

<b>SAE</b>	10W-30	15W-40
<b>API</b>	CK-4	CK-4/SN
<b>ACEA</b>	E9, E7	E9, E7
<b>Caterpillar</b>	ECF-3	ECF-3
<b>Cummins</b>	CES 20086/20081	CES 20086/20081
<b>Daimler</b>	MB 228.31	MB 228.31
<b>Detroit</b>	DFS 93K222	DFS 93K222
<b>FORD</b>	WSS-M2C171-F1	WSS-M2C171-F1
<b>Mack</b>	EOS-4.5 EO-O Premium Plus/EO-N	EOS-4.5 EO-O Premium Plus/EO-N
<b>MAN</b>	M3575	M3575
<b>MTU</b>	Category 2.1	Category 2.1
<b>Renault</b>	RLD-4	RLD-4
<b>Volvo</b>	VDS-4.5	VDS-4.5

#### **Features**

- Outstanding low temperature fluidity
- Designed for severe and high temperature conditions
- Superior all-round engine protection
- Exceptional thermal and oxidation stability
- Extra superior soot and wear control
- Robust reserved alkalinity (TBN) for outstanding sludge control and acid neutralization
- Excellent stay-in-grade stability ensures viscosity integrity and reduces oil consumption
- Enhanced frictional properties result in improved fuel economy and extended engine life
- Fully compatible with conventional mineral motor oils and other synthetic engine oils

**6318 Union Ave.  
Shreveport LA, 71106  
318-222-8787**



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### Applications

- Highly recommended for diesel engines equipped with after-treatment systems and EGR, naturally aspirated or turbocharged where API CK-4, CJ-4, CI-4+ engine oils are specified
- Suitable for many on- and off-high-way applications in engines manufactured by Cummins, Detroit Diesel, Caterpillar, Mack, Volvo and others
- A single product (15W-40) for mixed fleet operations

### Typical Properties

SAE Grade	10W-30	15W-40
Density@15°C, kg/L	0.867	0.876
Viscosity@40°C, cSt	82.9	116
Viscosity@100°C, cSt	12.3	15.7
Viscosity Index	146	143
CCS @ -25°C, cP	5970	---
CCS @ -20°C, cP	---	5250
HTHS@150° C, cP	3.5	4.1
Noack Volatility, wt%	12	12
Flash Point, °C, COC	238	238
Pour Point, °C	-33	-33
TBN, mg KOH/g	10	10
Sulfated Ash, wt%	1.0	1.0

Typical values do not constitute as specifications. Due to continual product research and development, the information contained herein is subjected to change without notification

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