



Perkins® Diesel Engine Oil (DEO)

The difference is in the detail

API CK-4 SAE 15W-40 and 10W-30.

Supports emissions reduction technologies while providing excellent performance and protection.

Recommended use.

- Perkins DEO-ULS (Ultra Low Sulphur) is the recommended engine oil for Perkins engines because it supports emissions reduction technologies while providing excellent performance and protection
- Perkins DEO-ULS is required for engines equipped with aftertreatment devices such as Diesel Particulate Filters (DPF), Diesel Oxidation Catalyst (DOC), Selective Catalytic Reduction (SCR), and/or Lean NOx Trap (LNT).
 - 2007/2010 on-highway exhaust emissions standards (U.S.)
 - Tier 4 (U.S.)
 - Stage IIIB/IV/V (EU)
 - Step 4 (Japan)
- Perkins DEO-ULS is recommended for engines without aftertreatment devices. NOTE: When fuel with sulphur levels higher than 1,000 ppm is used, fluid analysis is necessary to determine the proper drain interval.
- Perkins DEO-ULS is an excellent choice for mixed fleets of both on-highway and off-highway applications.

Features and benefits.

Perkins® DEO is tested and recommended by Perkins to meet the high standards of genuine Perkins parts.

Perkins DEO-ULS is formulated with precise amounts of sulphated ash, phosphorous, and sulphur to maintain the life of aftertreatment system components while providing excellent engine protection. In extensive testing, Perkins DEO-ULS is three times more effective in reducing the oil consumption rate than is required by Caterpillar ECF 3 standards. Perkins DEO-ULS was also shown to deliver excellent valve train protection and to minimise the formation of piston deposits.

- Reduced engine wear – improved detergents keep engine components cleaner and better soot dispersion improves viscosity which controls engine wear

- Minimised deposits – reduced oxidation breakdown and thermal degradation improves stability which minimises the formation of deposits
- Improved protection – specially designed additives deliver long lasting engine protection while supporting consistent emissions performance and extending the life of aftertreatment system components

Typical characteristics.*

SAE Viscosity Grade	15W-40	10W-30
Flash Point, °C (ASTM D92)	225	218
Pour Point, °C (ASTM D97)	-33	-36
Viscosity		
cSt @40° C (ASTM D445)	109	81.6
cSt @100° C (ASTM D445)	14.1	12.0
HTHS @ 150° C, cP (ASTM D4683)	4.1	3.6
Viscosity Index (ASTM D2270)	130	142
Phosphorous, % wt. (ASTM D4951)	0.10	0.10
Sulfur, % wt. (ASTM D2622)	0.24	0.24
Zinc, % wt. (ASTM D4951)	0.12	0.12
Sulfated Ash, % wt. (ASTM D874)	0.90	0.90
Volatility (ASTM D5800)	9.5	11.3
TBN (ASTM D4739)	8.6	8.7
Density @ 15.6 °C (ASTM)	0.875	0.868



For a copy of the MSDS please visit
www.perkins.com/msds

Meets or exceeds the performance requirements of:

API CK-4, CJ-4, CI-4 PLUS, CI-4 and CH-4
 Caterpillar ECF-3
 ACEA, E7-16, E9-16

Can be used in engines requiring:

Cummins CES 20081
 Detroit Diesel 93K218
 JASO DH-2-17
 Mack EOS-4.5/EO-O Premium Plus
 Volvo VDS-4.5/VDS-4/VDS-3

*The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

Why use Perkins genuine parts?

Perkins genuine parts are designed to work together to maximise component life and engine performance. Genuine parts restore optimum power and fuel efficiency and are supported by the Perkins warranty.

Perkins product support network.

We offer you the right parts and service solutions, when and where you need them.

Perkins distributors are highly trained experts helping to keep your entire fleet up and running to maximise your equipment investment.

Tested beyond industry standards.

Perkins DEO exceeded the Cat ECF-3 tests delivering outstanding component protection. Perkins DEO-ULS also performed significantly better than the required limits of API wear tests. During 500-hour endurance tests, Perkins DEO-ULS created only a minimal amount of piston deposits.

Perkins filters: complete protection for your machine.

Combine Perkins fluids with Perkins filters for a high level of contamination control and protection for your engine. We recommend Perkins filters for all Perkins engine applications.

Health and safety.

Read and understand the Material Safety Data Sheet (MSDS) before using this product.