

# Cat<sup>®</sup> DEO<sup>™</sup>

Diesel Engine Oil for North America (Canada, Mexico, United States).

SAE 15W-40, SAE 10W-30



## Recommended Use

- Cat earthmoving, commercial, marine\* and on-highway truck diesel engines
- Low-emission diesel engines including Cat engines with ACERT<sup>®</sup> Technology
- Heavy-duty diesel engines made by other manufacturers that recommend API CI-4 PLUS, CH-4 or CG-4 category oil (See “Typical Characteristics” on page 2 for more information)
- Automotive gasoline engines that require API SL category oils

\* Excluding 3600, C280, 3126 and 3116 MUI Marine and MaK diesel engines. The 3116 and 3126 MUI Marine diesel engines with closed crankcase ventilation systems should use Cat SAE0<sup>™</sup>.

## Discover the Difference

Cat DEO is developed, tested and approved by Caterpillar to meet the same high standards as all Genuine Cat Parts.

**Factory-Fill**—Used as standard factory-fill for Cat machines.

**Increased Engine Life**—Resists oxidation and prevents build-up of deposits on pistons and rings.

**Longer Intervals**—Extends oil drain intervals while providing excellent engine protection and performance when used in conjunction with our S•O•S<sup>SM</sup> Services oil analysis program.

**Proven Performance**—Tested thoroughly in Cat diesel engines including Cat engines with ACERT Technology to ensure excellent engine life and performance.

**Long-Lasting Protection**—Improved soot control and enhanced shear stability enable oil to maintain proper viscosity for longer operating periods in Cat engines with ACERT Technology, especially those equipped with HEUI systems.

## Caterpillar. The difference counts.<sup>™</sup>

Cat Dealers define world-class product support. We offer you the right parts and service solutions, when and where you need them.

The Cat Dealer network of highly trained experts keeps your entire fleet up and running to maximize your equipment investment.

**CATERPILLAR<sup>®</sup>**

# Cat DEO

## Cat DEO Performance

Performance Requirements	Test	Commercial ECF-1	Cat DEO
Cat 3406E Endurance Test	Cat Proprietary		
Cat C13 ACERT Endurance Test	Cat Proprietary		
Cat 3500 Series Test	Cat Proprietary		
Cat C13 ACERT Wheel Loader Test	Cat Proprietary		
Improved Soot-Viscosity & Shear Control			
High Temperature Shear			
Elastomer Compatibility			
Piston ring & Cylinder liner wear			
Valve train wear, sludge, oil filter plugging			
Aeration Control			
Bearing Corrosion			
Cam roller follower pin wear			
Copper, lead and tin erosion			
Foaming Control			
Viscosity Shear loss			
Viscosity Increase from soot			
Oxidation			
Piston deposits and oil control			

## Tested Beyond Industry Standards

In addition to the tests required for the ECF-1 classification, Cat DEO undergoes four proprietary multi-cylinder endurance tests, a variety of quality assurance tests and thousands of hours of field service. Only when it has passed all these tests can it be approved by Caterpillar. The chart to the left indicates the differences between ECF-1 standards and the proprietary standards of Caterpillar.

## Typical Characteristics\*

SAE Viscosity Grade	15W-40	10W-30
API Service Classification		
Diesel	CI-4 PLUS, CI-4, CH-4, CG-4, CF-4/CF	CI-4, CH-4, CG-4, CF-4/CF
Gasoline	SL	SL
OEM Performance Level:		
Caterpillar	ECF-1	ECF-1
Volvo	VDS-3	VDS-2
DDC	93K214	
Cummins	CES 20071/76/78	CES 20071/76
Mack	EO-NPP '03, EO-M Plus	EO-M Plus
Flash Point, °C (ASTM D92)	224	227
Pour Point, °C (ASTM D97)	-30	-33
Viscosity		
cSt @ 40°C (ASTM D445)	120.5	76
cSt @ 100°C (ASTM D445)	15.5	11.5
Viscosity Index (ASTM D2270)	135	145
Sulfated Ash, % wt. (ASTM D874)	1.3	1.3
TBN (ASTM D2896)	11.3	11.3
Zinc, % wt. (ASTM D4951)	0.146	0.146
Gravity @ 16°C		
API (ASTM D287)	29.3	31.8
Specific	0.880	0.867

\*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.

## Other Recommended Oils

### Cat DEO SYN™ 5W-40

For engines that must be started in extremely low temperatures down to -30°C(-22°F) consider using Cat DEO SYN 5W-40. This is a full synthetic diesel engine oil.

### S•O•S Services for early problem detection

Protect your investment with Cat S•O•S oil analysis, the ultimate detection and diagnostic tool for your equipment. S•O•S helps you detect potential problems before they can lead to major failures and costly, unscheduled downtime.

### Cat Filters: Complete protection for your machine

Combine Cat Fluids with Cat Filters for the highest level of contamination control and protection for your machine. We recommend Cat Filters for all Cat machine applications.

## Health and Safety

Under normal conditions of intended use, this product does not pose a risk to health. Excessive exposure may result in eye, skin or respiratory irritation. Always observe good hygiene measures. Read and understand the Material Safety Data Sheet (MSDS) before using this product. For a copy of the MSDS, visit us on the web at [www.catmsds.com](http://www.catmsds.com).

**CATERPILLAR®**