# $Cat^{\circ} DEO-ULS^{\circ}$

Engine oil for 2007 emission requirements.

#### SAE 15W-40



#### **Recommended Use**

Cat DEO-ULS exceeds the performance requirements of Caterpillar ECF-3 (Engine Crankcase Fluid Specification) and API CJ-4.

- Required for all 2007 on-highway engines equipped with aftertreatment systems using 15-ppm sulfur fuel
- May also be used with engines not equipped with aftertreatment systems using 500-ppm (or less) sulfur fuel without affecting the oil change interval

### **Discover the Difference**

Cat DEO-ULS is developed and tested to provide superior protection and life for Cat engines.

- Better Detergents-Protects against piston and ring groove deposits
- Advanced Additive Package—Improves protection of the engine and the Diesel Particulate Filter (DPF)
- Enhanced Dispersants—Provides better soot-related viscosity control, prevents viscosity loss from shearing and reduces oil consumption
- Improved Protection From Thermal and Oxidative Breakdown—Withstands higher sump temperatures while offering low-temperature pumpability

## Caterpillar. The difference counts.™

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®**

# Cat DEO-ULS

#### **DEO-ULS or DEO?**

On-Highway Engine	Aftertreatment System	Fuel Sulfur Content	Recommended Engine Oil
Model Year 2007 and Later	Yes – Diesel Particulate Filter (DPF)	≤ 15 ppm (Required)	Cat DEO-ULS*
Model Year Prior to 2007	Yes – Diesel Particulate Filter (DPF)	≤ 15 ppm (Recommended)	Cat DEO or Cat DEO-ULS
	Yes – Diesel Oxidation Catalyst (DOC)	≤ 15 ppm ≤ 500 ppm	
	None	≤ 15 ppm	
		≤ 500 ppm	

\* Minimum requirement API CJ-4 Oil

#### Typical Characteristics\*\*

SAE Viscosity Grade	15W-40	
API Service Classification		
Diesel	CJ-4, CI-4 PLUS/CI-4, CH-4,	
	CG-4, CF-4/CF	
Gasoline	SM	
OEM Performance Level:		
Caterpillar	ECF-3	
Volvo	VDS-4	
DDC	PGOS 93K218	
Cummins	CES 20081	
Mack	EO-O Premium Plus	
ACEA	E7	
Flash Point, °C (ASTM D92)	230	
Pour Point, °C (ASTM D97)	-30	
Viscosity		
cSt @ 40°C (ASTM D445)	115	
cSt@100°C (ASTM D445)	15.0	
Viscosity Index (ASTM D2270	137	
Phosphorous, % wt. (ASTM D4951)	0.100	
Sulfated Ash, % wt. (ASTM D874)	0.97	
Sulfur, % wt. (ASTM D2622)	0.3	
TBN (ASTM D2896)	10.3	
Gravity @ 16°C		
API (ASTM D287)	30.2	
Specific	0.876	
L		

\*\* 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.

Note: Initial distribution of DEO-ULS is limited to the United States, Canada and Mexico. Ordering and delivery are the same as other oils.

#### Health and Safety

www.cat.com

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.

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#### **Best Choice for New Engines**

In addition to prolonging the life of the Diesel Particulate Filter (DPF), DEO-ULS allows longer intervals between DPF cleanings. Oils from categories prior to the API CJ-4 category could cause premature filter plugging, leading to engine derating and poor fuel economy.

#### 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 resulting in costly and unschedules 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.

