# Cat<sup>®</sup> DEO<sup>™</sup>Monograde

Monograde Diesel Engine Oil for Cat 3600 series diesel engines

**SAE 40** 



### **Recommended Use**

- Cat DEO Monograde is recommended for older Cat engines equipped with precombustion fuel injection systems that permit the use of American Petroleum Institute CD or CF oil
- Cat DEO Monograde can be used with low-sulfur diesel fuel and protects Cat engines operating on higher sulfur diesel fuels (3600 series engines operating on fuel containing up to 1.30% sulfur, and precombustion engines operating on fuel containing up to 0.65% sulfur fuel)

# **Discover the Difference**

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

- Factory-Fill—Used as standard factory-fill for Cat 3600 series diesel engines.
- Increased Engine Life—Resists oxidation and prevents buildup 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>™</sup> Services oil analysis program.
- Proven Performance—Tested in Cat 3600 series diesel engines worldwide



## Sulfur-level compatibility

Cat DEO Monograde provides excellent performance and protection for the following Cat engines operating at or below these fuel sulfur levels:

- 3600 Series Direct Injection 1.30%
- Precombustion 0.65%

For higher fuel sulfur content, an S•O•S<sup>SM</sup> Services oil analysis program is recommended to optimize oil drain intervals.

#### **Typical Characteristics\***

| SAE Viscosity Grade                        | 40**    |
|--|---------|
| API Classifi cation                        | CF***   |
| ССМС                                       | D3      |
| Manufacturer Tests<br>Caterpillar (engine) | 1M-PC   |
| Gravity, API (ASTM D287)                   | 25.5    |
| Flash Point, °C (ASTM D92)                 | 215 min |
| Pour Point, °C (ASTM D97)                  | -18 max |
| Viscosity:                                 |         |
| cSt @ 40°C (ASTM D445)                     | 132     |
| cSt @ 100°C (ASTM D445)                    | 14.7    |
| Viscosity Index (ASTM D2270)               | 112     |
| Sulfated Ash, % wt. (ASTM D874)            | 1.4     |
| TBN (ASTM D2896)                           | 12.0    |
| Zinc, % wt. (ASTM D4951)                   | 0.10    |
| Phosphorus, % wt. (ASTM D1091)             | 0.09    |
|  |         |

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

\*\* Passes FZG DIN 51354-2 A/8, 3/90 FLS 12

\*\*\* Can be used in applications where the obsolete API CD classifi cation oil is recommended.

# 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.

#### **BUILT FOR IT.**

#### **Tested Beyond Industry Standards**

The large-bore, medium-speed Cat 3600 engines require oils that meet a unique standard not defined by any industry classification. Cat DEO Monograde meets that proprietary Caterpillar standard. If other brands of lubricant are used instead of Cat DEO, the manufacturer must demonstrate that the oil meets the same standard.

# S•O•S<sup>SM</sup> Services for early problem detection

Protect your investment with Cat S•O•S Oil Analysis or Service, 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 equipment

Combine Cat Fluids with Cat Filters for the highest level of contamination control and protection for your equipment. We recommend Cat Filters for all Cat equipment 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 guidelines. For more information, refer to the Material Safety Data Sheet at www.catmsds.com





www.cat.com