



Delo[®] HDD

High Performance Two-Cycle Diesel Engine Oil

High performance, monograde, low ash diesel engine oil specifically designed to lubricate Detroit Diesel Corporation (DDC) two-cycle diesel engines where API CF-2 performance lubricants are required.

APPLICATIONS

- DDC two-cycle diesel engine applications, Series 53, 71, 92 and 149 (except Series 149 engines in mine haul applications)
- Pre-1994 model high-speed, four-stroke North American diesel engines (where use of monograde oil is appropriate)
- Commercial road transport
- Quarrying and mining
- Earthmoving and construction equipment
- Agricultural tractors
- Small diesel engines in marine service (e.g., fishing, river transport, etc.)
- Manual transmissions (where oil type and viscosity are appropriate)
- Mobile hydraulic systems (where oil type and viscosity are appropriate)

PERFORMANCE STANDARDS

- API CF-2 licensed
- API CD-II and CD
- DDC 7SE-270, 9706 (Caltex Delo HDD has a specific DDC exemption for Base Number based on proven engine test and field performance record)
- Mack EO-K/2 (SAE 40)
- Extended Mack T-7 test (SAE 40)
- MIL-L-2104F (SAE 40)

ENVIRONMENT, HEALTH and SAFETY

Information is available on this product in the Caltex Material Safety Data Sheet (MSDS) and Caltex Customer Safety Guide. Customers are encouraged to review this information, follow precautions and comply with laws and regulations concerning product use and disposal. To obtain a MSDS for this product, visit www.caltexoils.com.

BENEFITS

- Maximum engine & exhaust valve life**
 Low ash formulation minimizes ash-induced piston and exhaust valve deposits in two-cycle diesel engines. Advanced metallic detergent and dispersant additive system provides excellent control of carbonaceous deposits under the high operating temperature conditions of supercharged or turbocharged diesel engines.
- Trouble-free operation**
 Very high oxidation stability protects against the formation of gums and varnish at elevated temperatures, resists thickening, and oil line and filter plugging.
- Maximum power output**
 Advanced detergent/dispersant additive system maintains power output by providing excellent control of piston ring and groove deposits that can affect engine operation.

KEY PROPERTIES

SAE Grade	40	50
Base Number,		
D2896, mg KOH/g	6.0	6.0
D4739, mg KOH/g	5.5	5.5
Phosphorus, m %	0.06	0.06
Sulfated Ash, m %	0.8	0.8
Viscosity		
mm ² /s @ 40°C	142	219
mm ² /s @ 100°C	14.4	19.1
Viscosity Index	99	98
Zinc, m %	0.075	0.075

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