



Delo[®] 6170 CFO SAE 40

High Alkaline Reserve, Chlorine-Free Railroad Diesel Engine Oil

Product Data Sheet

Customer benefits

- **Reduces maintenance costs**
High alkaline reserve ensures that corrosive acids formed by the combustion of fuel sulfur are effectively neutralized, thereby minimizing corrosive wear without causing valve distress due to "guttering". The special "zinc-free", ashless anti-wear additive system protects components from abrasive and adhesive wear, and guards against attack of silver plated bearings.
- **Maintains high power output**
Superior thermal and oxidation stability assist the detergent/dispersant additive system in providing excellent control of high temperature deposits in areas such as the undercrown of the piston and piston ring belt area, enabling piston rings to function efficiently.
- **Prolongs oil change-out periods**
Base Number (BN) level and superior alkalinity retention characteristics maintain sufficiently high BN under all service conditions to ensure corrosive acids formed by the combustion of fuel sulfur are effectively neutralized.
- **Prolongs service intervals**
Improved oxidation stability and increased alkalinity reserve when compared with LMOA Generation 4 oils, allows the retention of standard service intervals with today's high specific output and lower specific oil consumption engines.

Applications

- Medium speed, two and four-cycle railroad-type diesel engines.
- Including the most recent high-output, low oil consumption designs, whether in railroad, stationary or marine service
- Certain medium speed marine-type engines without active purification systems
- Electro-Motive Diesel (EMD) 567, 645 and 710 (two-cycle) and 265H (four-cycle) railroad diesel engines in railroad, marine and stationary powerplant service
- Fairbanks Morse (FM)/Alco 251 railroad diesel engines in railroad, marine and stationary powerplant service

Product features:

Premium performance, 17 Base Number, "zinc-free", LMOA Generation 5 diesel engine oil, utilizing chlorine-free additive technology, for use in railroad-type diesel engines, particularly modern higher output, lower oil consumption designs. Compared with Generation 4 oils, it has significantly enhanced alkaline reserve and oxidation resistance.

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- General Electric (GE) 7FDL, 7HDL and GEVO railroad diesel engines in railroad, marine and stationary powerplant service

Not suitable for use in marine-type engines equipped with active purification systems.

Performance Standards

- LMOA Generation 5
- EMD (Worthy of Full-Scale Field Test Approval Formulations PED-1385 & PED-1753 (Pending for formulation OR-21591)
- General Electric (Fundamental Approval) Formulations PED-1385, PED-1753 & OR-21591

Key Properties

DELO 6170 CFO SAE 40	RESULTS
SAE Grade	40
Product Code	550037
Base No.,	
D2896, mg KOH/g	17.0
D4739, mg KOH/g	16.4
Sulfated Ash, m %	2.0
Viscosity,	
mm ² /s @ 40°C	148
mm ² /s @ 100°C	14.7
Viscosity Index	98
Zinc, mg/kg	<10



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continued

Service Considerations

Owing to the higher level of dispersancy of Delo 6170 CFO, it is not suitable for use in engines which are equipped with active purification systems. In these, marine trunk piston engine oils (TPEOs) such as Taro 20 DP should be used. Such systems continuously remove combustion contaminants from the oil, by use of centrifugal type separators and automatic back flushing type filtration systems. As a consequence, TPEOs are formulated to hold contaminants in suspension while in the engine and reserve tank, but release them in the purification system. At the same time, they must resist the loss of detergent/dispersant additives with the contaminants whilst undergoing purification. Because of this, they are formulated differently from automotive and railroad diesel engine oils which are designed for systems without active purification. Consequently, one type should never be substituted for the other.

The chlorine-free formulation of Delo 6170 CFO offers easier logistics for collection and disposal of used oil where the inclusion of chlorine-containing products is limited by regulation.

The information given in the typical data does not constitute a specification but is an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved. This supersedes all previous editions and information contained in them.

Produced by Chevron Lubricants; Africa, Middle East and Pakistan.

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