



Delo® 6130 CFO SAE 40

13 Base Number, 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 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

Superior alkalinity retention characteristics maintain sufficiently high Base Number (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 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

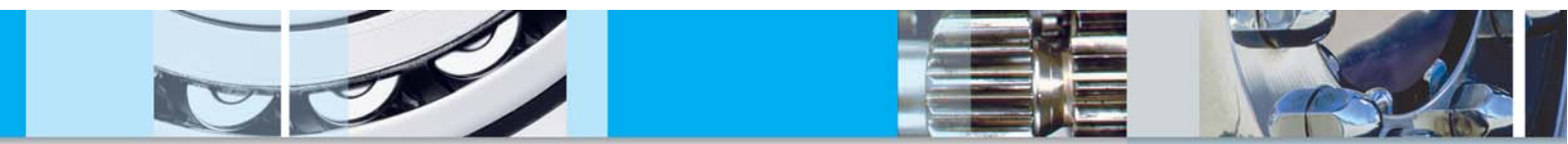
- Medium speed, two and four-cycle railroad-type diesel engines, Including the most recent high-output, low oil consumption designs, whether in railroad, stationary or marine service.
- Electro-Motive Diesel (EMD) 567, 645 and 710 (two-cycle) and 265H (four-cycle) railroad diesel engines in railroad, marine and stationary powerplant service
- General Electric (GE) 7FDL, 7HDL and GEVO railroad diesel engines in railroad, marine and stationary powerplant service
- Detroit Diesel Corporation (DDC) two-cycle high speed diesel engines in on and off highway applications, including use with low and ultra low sulfur diesel fuel.

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

Not recommended for use in marine and other transmissions and gearsets where heavy duty diesel engine oils are customarily used.

Product features:

- Delo® 6130 CFO is a premium performance, 13 Base Number, “zinc-free”, LMOA Generation 5 diesel engine oil.
- Delo® 6130 CFO utilizes chlorine-free additive technology, for use in railroad-type diesel engines, particularly modern higher output, lower oil consumption designs.
- Delo® 6130 CFO, when compared with Generation 4 oils, has significantly enhanced dispersancy and oxidation resistance.



Product specifications

DELO®6130 CFO	
KEY PROPERTIES	
Grade	40
Product Code	550040
Base No.,	
D2896, mg KOH/g	13.0
D4739, mg KOH/g	12.5
Sulfated Ash, m %	1.5
Viscosity, mm ² /s @	
40°C	144
mm ² /s @ 100°C	14.7
Viscosity Index	101
Zinc, mg/kg	<10

1212

ENVIRONMENT, HEALTH and SAFETY

Information is available on this product in the Material Safety Data Sheet (MSDS) and 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.deloperformance.com.

Performance standards

- LMOA Generation 5 (self-certified)
- API CF, CF-2 (self-certified)
- EMD (Internal Listing, Worthy of Full Scale Field Trial)
- GE (Fundamental Approval)



Delo®6130 CFO SAE 40

Service Considerations

Railroad diesel engine oil base number selection is typically chosen on the basis of both the desired drain interval and diesel fuel sulfur content. With lower fuel sulfur contents, say below 0.7 mass%, either 13 or 17 BN oils may be used according to the desired drain interval, which is often linked to locomotive general service and/or safety check intervals. With fuel sulfur contents above 0.7 mass%, use of 17 BN oil (Chevron Delo® 6170 CFO) is preferable.

Detroit Diesel Corporation's recommendations for its non-discontinued two-cycle high speed diesel engines primarily recommended monograde oils having a sulfated ash content of 1.0 % maximum (0.8% maximum for 149 series engines). However zinc-free railroad type engine oils meeting API CF-2 were also recommended, and without a restriction on sulfated ash content. Delo® 6130 CFO SAE 40 by design meets DDC requirements in this respect, as has provided exceptional in-service performance in DDC two-cycle engines. Chevron has more than thirty years experience with the application of its zinc-free railroad diesel engine oils.

Delo® 6130 CFO SAE 40 is not intended for use in marine and other transmissions and gearsets, which are often lubricated with high-speed diesel engine oils.

Owing to the higher level of dispersancy of Delo® 6130 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 Delo 1000 Marine 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® 6130 CFO offers easier logistics for collection and disposal of used oil where the inclusion of chlorine-containing products is limited by regulation.

This bulletin was prepared in good faith from the best information available at the time of issue. While the values and characteristics are considered representative, some variation, not affecting performance, can be expected. It is the responsibility of the user to ensure that the products are used in the applications for which they are intended.

Produced by:
Chevron Lubricants
- Asia Pacific