CALTEX

PRODUCT BULLETIN

Delo® 6200

High & Medium Speed Diesel Engine Oil

High performance, high alkaline reserve, "zinc-free", LMOA Generation 4, API CF-2/CF oil for use in high and medium speed, heavy-duty automotive and locomotive diesel engines burning distillate fuel with sulfur content above 0.7 mass %.

APPLICATIONS

- High speed, four-cycle stationary, marine and railroad diesel engines
- High speed, heavy-duty, four-cycle automotive diesel engines
- High speed, two-cycle automotive, stationary and marine diesel engines
- Medium speed, two and four-cycle stationary and railroad diesel engines
- Certain medium speed marine-type engines without active purification systems
- Automotive, locomotive, marine, industrial power generation and drilling rig services
- General Motors EMD railroad diesel engines (SAE 40)
- General Electric railroad diesel engines (SAE 40)
- Ruston-English Electric "RK" Series engines (SAE 40)
- Ruston-Paxman diesel engines in railroad service
- Caterpillar 3600 engines (SAE 40 - specific basestocks only) and 3500 engines (SAE 40 - railroad service only)
- Caterpillar pre-chamber models (particularly the "D" Series) and pre-1991 3406S direct injection models
- Detroit Diesel two-cycle engines burning fuels with sulfur contents above 0.5 mass % (SAE 40)
- Wärtsilä Vasa 24 engines not equipped with marine-type centrifugal purification systems

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

PERFORMANCE STANDARDS

- LMOA Generation 4 (SAE 40)
- API CF-2 (SAE 40)
- API CF
- Japanese CD
- Komatsu Export Listing

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.

A ChevronTexaco Product

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 power output

Outstanding 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.

Proven performance

Special "zinc-free" formulation technology has an outstanding worldwide track record of reliable performance in a wide range of diesel engines operating on high sulfur fuels under severe conditions.

KEY PROPERTIES

SAE Grade	30	40
Base No.,		
D2896, mg KOH/g	20.0	20.0
D4739, mg KOH/g	19.3	19.3
Sulfated Ash, m %	2.4	2.4
Viscosity,		
mm^2/s @ 40°C	109	145
mm^2/s @ 100°C	12.1	14.7
Viscosity Index	101	100
Zinc, mg/kg	<10	<10

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Produced by ChevronTexaco Global Lubricants Solutions

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SERVICE CONSIDERATIONS

Locomotive engine manufacturers operate restrictive, basestock-specific lubricant approval schemes. Approvals are obtained on an “as needed” basis. Where a specific manufacturer’s approval is required, prior confirmation of the availability of such should be sought.

Due to the higher dispersancy of Delo 6200, it is not suitable for use in engines which are equipped with active purification systems where marine trunk piston engine oils (TPEOs), such as Delo 2000 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 that are designed for systems without active purification. Consequently, one type should never be substituted for the other.

With regard to high speed, two-cycle diesel engines, Detroit Diesel has a strong preference for low sulfated ash lubricants. However, for high sulfur fuel applications, Detroit Diesel recognizes the benefits of higher ash, “zinc-free”, Delo 6200 type oils in controlling sulfur-related corrosive wear.