

RAILLUB ZF

ZINC FREE MEDIUM SPEED DIESEL ENGINE OIL

Description

Raillub Zinc Free series are high performance, zinc-free and chlorine-free oils specially designed to provide excellent engine cleanliness and oil filter life in the modern railroad diesel locomotive engines. These oils are formulated with an additive package endorsed by engine manufacturers' and meet the requirements of newer diesel locomotive engines of General Electric (GE) and Electro Motive Division (EMD) of General Motors. Though the newer engines consume significantly less oil and operate at higher temperatures, the excellent TBN retention property and improved oxidation resistance of Raillub Zinc Free provide superior service and facilitate extended drain intervals. This oil exceeds the performance requirements of Locomotive Maintenance Officers Association (LMOA) Generation 5 and API CF/CF-2.

Raillub Zinc Free is applicable for:

- Railroad diesel locomotive engines specifying LMOA generation 5 quality oils
- Medium speed two-cycle and four-cycle railroad engines, including newer diesel locomotive engines of GE and EMD of General Motors
- Marine and stationary engines for power generation or off-shore drilling requiring zinc-free oils
- Detroit Diesel 149 series engines operating under severe conditions
- Stationary engines requiring API CF and CF-2 quality oils

Typical Properties

SAE		SAE 40
		LUB005570
Density 15 °C	kg/m ³	898
Viscosity 40 °C	cSt	154.0
Viscosity 100 °C	cSt	15.6
Viscosity Index		100
Pour Point	°C	-30
Flash Point C.O.C	°C	>220
TNB	mgKOH/g	13
Sulphated Ash	%wt	1.50
Zinc	ppm	<10
Operating Temperature	°C	-18/150



Performance levels

- API CF-CF-2
- LMOA Generation 5
- General Motors EMD
- GE Generation 4 Long Life

Benefits

- Exceptional detergency/dispersancy to provide excellent engine cleanliness, especially engine top decks
- Excellent in-service retention of TBN to facilitate extended drain intervals
- High thermo-oxidative stability to protect against sludge formation, hence providing cleaner engines
- Zinc-free formulation to protect silver bearings against corrosion
- Non-chlorinated additive package to help in reducing used oil disposal costs