



## Product Data Sheet

### Railroad Diesel Engine Oil SAE 40 & SAE 20W-40

#### DESCRIPTION

Nemco Railroad Diesel Engine Oils are an optimized formulation that will satisfy EPA emission requirements, the engine needs of lower sulphur fuels and emission control systems for both new and older locomotive engines. These formulations are zinc-free for the protection of silver bearings, and chlorine free to reduce environmental and disposal impact. The balanced detergent, dispersant, and anti-wear system allows these oils to provide superior soot, sludge, viscosity, and wear control resulting in improved engine cleanliness, lower wear and particulate emissions. The advanced technology provides superior liner scuffing protection, reduced ring wear, and reduced piston deposits. Improved thermal and oxidative stability minimizes oil degradation, reduces sludge to provide long drain intervals and improved filter life. Our Railroad Diesel Engine Oil provides the proper lubrication for two-cycle and four-cycle naturally aspirated low output and unrestricted use in high output turbocharged engines. This includes railroad, marine, and stationary engines where zinc free oils are required.

#### Features & Benefits

- OEM Approved, meets latest GE and EMD oil specifications, and also recommended for older engines
- Fuel Economy: Multi-grade 20W-40 maintains fuel economy and cold start benefits
- Engine Protection: Excellent wear, deposit, high temperature stability, and oxidation control
- Strong TBN retention providing acid neutralization all working together to extend engine life, minimizes maintenance, and improved operational efficiencies
- Zinc Free: Superior corrosion control for silver bearing and yellow metals in these style engines
- Emission Benefits: Reduced SAPS lower particulates to help meet EPA Tier 3 and 4 standards
- Extended Service: Field-testing supports extended drain intervals, filter life and lower oil consumption, which improves locomotive efficiency and reduces maintenance cost

#### Applications

- Class 1 Railroads, Regional, Short Line, Yard, and Switcher engines
- All two- and four-cycle, naturally aspirated or turbocharged medium speed diesel engines
- Railroad, marine and stationary engines (power generation, off-shore drilling) where zinc-free oils are required

#### Meets and/or exceeds requirements for

- API CF-4, CF-2 and CF
- EMD Generation V
- GE Generation 4 Long Life
- LMOA Generation V, and Generation 4 Long Life
- Alco, Baldwin, Fairbanks-Morse engines

**Typical Characteristics – Railroad DEO Engine Oils**

SAE Grade	40	20W-40
Density, kg/L @ 15 C	0.901	0.893
Viscosity, Kinematic cSt at 40°C cSt at 100°C	170 15.3	142 15.4
Viscosity Index	90	112
Pour point °C (°F)	-23 (-10)	-26 (-15)
Cold Cranking Viscosity, cP at -15°C	n/a	8,500
Total Base No. (TBN)	9	9

*Physical characteristics shown in the table are typical and may vary slightly.*