



Railroad Diesel Engine Oil

GE and EMD Approved 9 TBN Railroad Oil

General Description

Railroad Diesel Engine Oil is an optimized formulation that contains lower sulfur fuels and increased emission control systems for both new and older locomotive engines.

This formulation is also zinc-free and provides exceptional protection of silver bearings and is chlorine free to reduce environmental and disposal impact. The balanced detergent, dispersant and anti-wear system allows this 9 TBN oil 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. Additionally, Railroad Diesel Engine Oil offers improved thermal and oxidative stability, minimizes oil degradation, reduces sludge to provide long drain intervals and improved filter life.

Railroad Diesel Engine Oil provides the proper lubrication for 2-cycle and 4-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 and Benefits

- **OEM Approved:** Meets newest GE and EMD oil specifications. Also recommended for older engines.
- **Fuel Economy:** The multi-grade 20W-40 provides better fuel economy and cold start benefits.
- **Engine Protection:** Excellent wear, deposit, high temperature stability and oxidation control. Strong TBN retention providing acid neutralization to extend engine life and minimize maintenance.
- **Zinc-Free:** Provides superior corrosion control for silver bearing and other yellow metals.
- **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.

Railroad Diesel Engine Oil

GE and EMD Approved 9 TBN Railroad Oil

Typical Applications

Railroad Diesel Engine Oil is designed to exceed and meet: EMD Generation VI, GE Generation VI approved (Alfa #2021-3001 & 2021-3002), Long Life LMOA Generation V, Generation 4 long life, Alco, Baldwin and Fairbanks-Morse engines

Typical Customers

- Class 1 Railroads, Regional, Short Line, Yard, and Switcher engines.
- All 2- and 4-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.

Typical Properties

| SAE Grade | Multi-grade 20W-40 | Straight Grade 40 |
|---------------------------|-----------------------|----------------------|
| API Gravity / lbs./gal. | 26.9/7.4 | 25.6/7.5 |
| Viscosity @ 40°C, cSt | 142 | 170 |
| Viscosity @ 100°C, cSt | 15.3 | 15.0 |
| Viscosity Index | 112 | 90 |
| CCS Viscosity @ -15°C, cP | <9500 | NA |
| Pour Point | -15°F | -10°F |
| Flash, COC, °F | 450 | 450 |
| Total Base No. (TBN) | 9 | 9 |

The typical properties listed reflect the general characteristics of the product, and are not manufacturing specifications. Normal batch-to-batch variations should be expected.

Health & Safety

A complete safety data sheet is available by calling 1-651-355-8438 or visit cenex.com/sds-library.