



Railroad Diesel Engine Oil 13 TBN

(September 2021 Edition)

AMALIE Railroad Diesel Engine Oils 13 TBN engine oils have outstanding high dispersancy and high alkalinity, for use in diesel engines used in railroad, power generation, oil well drilling, and marine and industrial service requiring a zinc-free oil and Generation 4 LL or Generation 5 lubricant characteristics. These oils represent the standard in oil technology for this type of service and satisfy the requirements of older as well as the newest engine technology. These Engine Oils are manufactured using the highest quality base oils and a non-chlorinated additive package that offers low engine wear and minimizes used oil disposal issues. New engine designs, aimed at reducing operating expenses, operate at higher combustion pressures and higher temperatures which require improved oxidation and viscosity control. Increased alkalinity reserve serves to control corrosive wear and deposit formation required by new piston and ring designs. This advanced formulation is designed to successfully handle these requirements by providing outstanding resistance to viscosity increase due to superior oxidation and thermal stability, and by providing a high alkalinity level (13 TBN by ASTM D 2896).

AMALIE Railroad Diesel Engine Oil 13 TBN is offered in SAE 40 Viscosity range and is recommended for use in all railroad-type diesel engines for locomotive, marine equipment, stationary electric generating plants, offshore drilling equipment, and many other applications where large medium-speed EMD or GE diesel engines are used for primary power. These oils are completely compatible with earlier railroad oils, miscible with competitive railroad type oils and additive systems consistent with engine manufacturers recommended practices. These oils provide excellent performance in older locomotive types such as Sulzer, Baldwin, and ALCO. In addition, these oils are recommended for use in Caterpillar and other diesel engines operating where sulfated ash levels above 1% are acceptable and where DDC engines are used for auxiliary power. Detroit Diesel Corporation approves the use of Generation 4 and 5 zinc-free railroad engine oils in these applications.

Typical Physical and Chemical Properties

SAE Grade.....	40
TBN, mgKOH/g.....	13
Kinematic Viscosity @100°C, cSt.....	14.60
Kinematic Viscosity @40°C, cSt.....	141.0
Viscosity Index.....	100
Sulfated Ash (%M).....	1.3
Flash Point, °C	240
Pour Point, °C	-15
Zinc (ppm).....	<10
Chlorine (ppm).....	<50
Foam Sequence I (Tendency/Stability).....	0 / 0
Foam Sequence II (Tendency/Stability).....	0 / 0

Typical values are listed. Variations not affecting the performance of this fluid may occur during production; however, these variations will not fall outside of set specification parameters.

Health and Safety

Safety Data Sheets (SDS) are available from your sales representative or at AMALIE.com.