

## TECHNICAL DATA SHEET

## Railroad Diesel Engine Oil 20W-40 9 TBN

(July 2021 edition)

**AMALIE Railroad Diesel Engine Oil 20W-40 9 TBN** represents the latest advancement in zinc free and chlorine free<sup>1</sup> railroad diesel engine oil technology. This engine oil provides superior liner scuffing protection, reduced train wear, and reduced piston deposits. Improved thermal and oxidation stability minimizes oil degradation and reduces sludge formation.

**AMALIE Railroad Diesel Engine Oil 9 TBN** offers advanced detergency and dispersant technology. The exceptional Total Base Number retention and oil consumption reduction characteristics of the oil are directly linked to its superior oxidation control, viscosity retention, shear stability, acid production control and wear protection.

AMALIE Railroad Diesel Engine Oil 9 TBN offers the highest levels of oil performance and quality to insure superior engine productivity, maximum power utilization and reduced life-cycle maintenance costs. It meets the performance requirements of General Electric and EMD (Electro- Motive Division). It also meets the requirements of Tier 3, LMOA Generation 6, API CD, CF and CF-2 as well as Caterpillar 3600 for mixed fleet operation.

1. Contains less than 50 ppm chlorine.

## Typical Physical and Chemical Properties

SAE Grade	20W-40
TBN, mgKOH/g	9
Kinematic Viscosity @100°C, cSt	14.5
Kinematic Viscosity @40°C, cSt	135
Viscosity Index	106
Sulfated Ash (%M)	<1
Flash Point, °C	240
Pour Point, °C	-30
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.