

# RUBIA G9



**RAILROAD-MARINE-INDUSTRIAL  
DIESEL ENGINE OIL**



**Zinc-free engine oil for GM/EMD and GE diesel engines**

## APPLICATIONS

### All types of service

- RUBIA G9 is suitable for the recent generation of GM/EMD and GE diesel engines fitted on class I railroad locomotives and on industrial applications (power generation, offshore well drilling rigs, marine propulsion, etc. It was developed for modern low emission railroad diesel engines using low sulfur or ultra-low sulfur diesel fuel that is mandated in the US by the year 2012.
- Formulated to meet the most severe servicing conditions for both long and short line railroads with enhanced particulate matter emission control to meet EPA Tier 3 and Tier 4 standards.

## PERFORMANCE

### Specifications

- API CD  
Meets and exceeds:

### OEM Performance Levels

- General Motors Electro-Motive Division Generation 5
- General Electric Generation 4 LL (Long Life)

## CUSTOMER BENEFITS

### Increased drain intervals

### High technical performance

- Its high performance level allows longer drains intervals
- Specially formulated as zinc free for GM/EMD engines equipped with silver bearings and for GE engines. Designed for low sulfur and ultra low sulfur fuels.
- Low SAPS (sulfated ash/phosphorus and sulfur) reduces emissions
- Very good oxidation resistance enabling engine protection when running idle or under rough operating conditions (hot climate, mountain service and other heavy duty service)
- Highly effective detergent-dispersant additive systems with higher soot loading capability

## CHARACTERISTICS

SAE viscosity grade	40	20W-40
Specific gravity	0.883	0.881
Viscosity @ 40°C, cSt (ASTM D 445)	147	140
Viscosity @ 100°C, cSt (ASTM D 445)	19.9	15.1
Viscosity Index (ASTM D 2270)	101	110
Flash point °F (°C) (ASTM D 92)	262	(251)
TBN (ASTM D 2896)	9.3	9.3
Cold crank, cps @ -20°C (ASTM D 5293)	NA	6000
Pour point, °F (°C) (ASTM D 97)	-6 (-21)	-11 (-24)
Metals, ppm		
Zinc	<10	<10
Calcium	3000	3000
Ash, wt% (ASTM D 874)	0.98	0.98

TOTAL Lubricants USA, Inc.