Mobil

DIOL 9 RD 40 and 2040

Mobil Commercial Vehicle Lube , United States

Railroad Crankcase Oils

Product Description

DIOL 9 RD series oils are premium heavy-duty crankcase lubricants for locomotive diesel engines. These products are designed to meet the severe service demands imposed by the latest railroad diesel locomotive engines. An Electro-Motive Diesel (EMD) and General Electric (GE) endorsed additive system provides excellent engine protection, oil consumption control and oil drain interval extension capability.

Features and Benefits

•Zinc Free - Excellent Silver Bearing Lubricity

• Enhanced Oxidation, Sludge-Soot Handling and Viscosity Control

• Excellent Deposit, Corrosion and Wear Control

• Formulated for use with low sulfur and ultra-low sulfur diesel fuels

• Extended oil drain intervals and high locomotive utilization rates

• Chlorine Free

Applications

DIOL 9 RD oils are formulated to an LMOA Generation 5 quality level with an engine manufacturer endorsed additive package. They meet the requirements of for all EMD and General Electric diesel locomotives.

The newest improvements in General Electric and EMD engines are modified piston rings and cylinder liners that have significantly reduced oil consumption. This drastic reduction in the amount of fresh oil makeup, plus the higher operating temperatures of the newer engines, places an extra burden on the oil. The good base number retention and improved oxidation inhibition of DIOL railroad oils provide excellent service under these conditions, even with extended oil drain intervals.

Specifications and Approvals

This product has the following approvals:	9 RD 40
EMD Domestic Common Additive Approach (recognition ltr on file)	X
GE Transportation, A Wabtec Company LMOA Gen 4 LL - Fundamental Approval (letter on file)	X

Properties and Specifications

Property	9 RD 40	9 RD 2040	DIOL 9 RD 20W-40
Grade	SAE 40		
Ash, Sulfated, mass%, ASTM D874	1.0	1.0	
Chlorine, ppm, ASTM D6443	<20	<20	
Flash Point, °C, ASTM D92			235

Property	9 RD 40	9 RD 2040	DIOL 9 RD 20W-40
Flash Point, Cleveland Open Cup, °C, ASTM D92	262		
Kinematic Viscosity @ 100 C, mm2/s, ASTM D445	14.7	15.3	
Kinematic Viscosity @ 40 C, mm2/s, ASTM D445	141	135	
Pour Point, °C, ASTM D97	-21	-16	
Total Base Number, mgKOH/g, ASTM D2896	9.1	9.1	
Viscosity Index, ASTM D2270	104	111	
Zinc, mg/kg, ASTM D5185	<10	<10	

Health and Safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ http://www.msds.exxonmobil.com/psims/psims.aspx

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Exxon Mobil Corporation
22777 Springwoods Village Parkway
Spring TX 77389

1-800-ASK MOBIL (275-6624)

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