

RM 100 CI-4 Diesel

SAE 15W40

Description

RoadMaster 100 SAE 15W40 mineral diesel engine oil meets the API CI-4 / SL specification, Mack Trucks EO-N and Cummins CES 20076, 20077 and 20078 specifications. **RoadMaster 100** is suitable for use in all European heavy duty diesel engines complying with the latest Euro 4 exhaust emission legislation.

Features & Benefits

RoadMaster 100 has a unique formulation that provides a high Total Base Number (TBN) indicting a high alkalinity which is essential to combat corrosion from high sulphur fuel still found in some countries.

Specifications

Properties	Method	Result
Specific Gravity @ 20°C	ASTM D1298	0.870
Kinematic Viscosity @ 40°C	ASTM D445	110.0
Kinematic Viscosity @ 100°C	ASTM D445	14.7
Viscosity Index	ASTM D2270	137
Sulphated Ash %Wt	ASTM D874	1.39
Total Base No. mg KOH/gm	ASTM D2896-11	10.4
Phosphorus (ppm)	ASTM D3231	0.108

Performance Levels

API CI-4	ACEA E7-16 (2016)	MB-Approval 228.3
Volvo VDS-3	Mack EO-N	Renault RVI RLD-2
MTU Type 2	Cummins CES 20076	Cummins CES 20077
Cummins CES 20078	DEUTZ DQC III-18	CAT ECF-1-a
Detroit Diesel DDC 93K215	MAN M 3275	Global DHD-1
JASO DH-1		

Additional Information

Anti-pollution legislation in the US, Europe and Japan continues to drive engine oil specifications. The aim of the legislation for all countries is similar, with the result that specifications are now becoming more closely aligned that ever before. The new heavy duty diesel oil specification introduced recently in Europe, ACEA E7, is recognised as a leading global standard of performance. ACEA E7 is a combination of European and American test procedures. The Cummins Engine Co. oil specification, CES20078, includes ACEA E7 amongst its requirements!



RM 100 CI-4 Diesel

SAE 15W40

The Japanese Automotive Standards Organisation (JASO) DH-1 specification addresses the performance requirements of Japanese designed engines. These specifications which meet the most severe requirements of the world's three manufacturing groups have manufacturing groups have now been combined into one joint international specification, **DHD-1**.

Roadmaster 100 15W40 MEETS ALL THESE SPECIFICATIONS INCLUDING DHD-1 AND IS A TRUE INTERNATIONAL OIL

Effect on Engines. The diesel is a comparatively 'clean' engine and the new regulations are concerned only with oxides of nitrogen (which helps to form smog) and particulate matter (soot). Current engine designs employ exhaust gas recirculation and retarded timing of the fuel injection. These measures are intended to reduce exhaust emissions.

Effect on Oil. The engine design changes which have been introduced are estimated to double the thermal stress on the oil and at the same time greatly increase the quantity of soot introduced into the oil. Engine oils must now possess greatly increased powers of dispersancy to keep the soot in suspension. Soot is also formed by combustion of the lubricating oil and the oil consumption of modern engines has drastically reduced. This in turn exposes the oil longer to the hot zones of the engines and less fresh oil will be added between oil changes. The ash content of the oil is now considered as less significant and ash contents are rising, giving better detergency and higher TBN.

Viscosity. American engine manufactures refer that the viscosity of CI-4 oils be SAE 15W40. Accordingly, the viscosity of Roadmaster 100, SAE 15W40 is in line with manufacturers preferences.

Master Item# 1001
Pack Size Availability: 5L, 20L, 200L & IBC = 1000L

Last Updated: 29th November 2023 Previously Updated: 23rd May 2023