

Technical Data Sheet

Shell Rimula R2 CNG 15W-40 (CF)

Reliable Lubrication for CNG Engines

Multigrade Heavy Duty CNG Engine Oil

Shell Rimula R2 CNG Energised Protection oil uses proven combinations of performance additives to ensure that the oil adapts and protects under the full range of pressures and temperatures found in compressed natural gas (CNG) fuelled engines.

Shell Rimula R2 CNG addresses an emerging market issue for cost competitive supply of engine oils suitable for use in heavy duty CNG powered engines

ENERGISED PROTECTION

Performance, Features & Benefits

Low cost offer

Based on recent field trial experience, Shell has developed an approach to a more competitive offer in those cases where Rimula NX and ND do not meet the customer need. Shell Rimula R2 CNG is able to offer "low-cost" oils suitable • When OEM approved oils do exist these are often expensive for heavy-duty CNG powered engines.

Good piston & engine cleanliness

Optimised balance of detergency and dispersancy provides good piston and engine cleanliness ensuring long and efficient engine operation.

Ignition system protection

Proven in real-world applications, Shell Rimula R2 CNG oils have been shown to be compatible with spark-ignition systems found in CNG engines ensuring reliable ignition and engine operation.

· Good wear protection

Contains an optimized active anti-wear system that balances the more demanding requirements of on-highway applications (compared to stationary gas engine) with the need to minimize spark plug fouling.

Main Applications



· Dedicated CNG engine oil performance

Suitable for many buses and trucks fitted with engines designed to run on 100% CNG where:

- · Typically no formal OEM approval or specification exists for these oils;
- and uncompetitive;
- · Competitor offers are often "unapproved" oils that are offered on the basis of proven performance in similar operations.

Given the wide range of engine types and operating conditions in the field, we recommend the use of a lubricant analysis program such as Shell LubeAnalyst and engine inspection program such as Shell LubeVideoCheck to optimize the use of Shell Rimula R2 CNG in specific customer applications.

Specifications, Approvals & Recommendations

- Mahindra and Mahindra Ltd
- API CF

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

Typical Physical Characteristics

Properties			Method	Shell Rimula R2 CNG
SAE Viscosity Grade				15W-40
Kinematic Viscosity	@40°C	cSt	ASTM D445	100
Kinematic Viscosity	@100ºC	cSt	ASTM D445	14.5
Viscosity Index			ASTM D2270	149
Density	@15°C	kg/l	ASTM D4052	0.890
Flash Point (COC)		٥C	ASTM D92	225
Pour Point		٥C	ASTM D 97	-27

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

Health, Safety & Environment

· Health and Safety

Shell Rimula R2 CNG 15W-40 (CF) is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from http://www.epc.shell.com/

Protect the Environment

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

Additional Information

Advice

Advice on applications not covered here may be obtained from your Shell representative.