



## Technical Data Sheet

- Maintenance Savings
- Low Emissions

# Shell Rotella Fleet 15W-40

## Synthetic Blend Fleet Multigrade - Heavy Duty Diesel Engine Oil

Shell ROTELLA Fleet synthetic blend engine oil has been formulated to provide reliable protection and performance to fleet and off-highway equipment, offering the convenience of a single oil suitable for a wide range of OEMs.

Shell ROTELLA Fleet oil uses the latest “Low-SAPS” additive technology to protect under the most severe engine conditions found in modern, low-emission engines.

### Performance, Features & Benefits

Shell ROTELLA Fleet engine oil has been designed to provide hard working protection that adapts to your driving conditions resulting in:

- Improved deposit protection versus prior formulation.
- Demonstrated resistance to breakdown under high temperatures.
- Demonstrated protection against oxidation and corrosion in the presence of biodiesel.
- The low ash formulation helps protect the exhaust catalysts and particulate filters found on the latest low emission vehicles.

- **Helps control engine wear**

Shell ROTELLA Fleet has been formulated to help protect against wear, and has been tested and proven through field trials and industry wear tests to maximize engine efficiency and help prolong engine life.

- **Helps control deposits in engines**

Formulated for enhanced deposit protection, which exceeds API CK-4 deposit test requirements, to help keep engines cleaner over the oil drain interval.

- **Improved oxidation protection under extreme conditions**

Shell ROTELLA Fleet delivers improved resistance to oil breakdown under extreme high temperature conditions versus prior CJ-4 performance specification.

- **Extended drain capable**

Proven performance in standard oil drain intervals up to 50,000 miles and tested in field trials to show Shell ROTELLA Fleet demonstrates good TBN retention, low TAN increase, low wear metals, and low oxidation at drain.

- Always follow OEM recommendations when it comes to setting drain intervals for your specific operations and equipment.

### Main Applications



Suitable for use in all on or off highway engines requiring an API CK-4, CJ-4, CI-4 Plus, CI-4 or CH-4 diesel oil in this viscosity grade.

- **Severe duty heavy duty diesel engines**

Provides outstanding protection for virtually all heavy duty diesel engines, including the latest emission controlled engines using EGR and containing a Diesel Particulate Filter.

- **Off-highway applications**

Suitable for use in agricultural, mining, logging, and construction applications, even with high levels of fuel Sulfur.

### Specifications, Approvals & Recommendations

- API CK-4, CJ-4, CI-4 Plus, CI-4, CH-4
- ACEA E9, E11
- Allison TES-439
- Caterpillar ECF-3, ECF-2
- Cummins CES 20086, 20081
- Detroit Fluids Specification (DFS) 93K222, 93K218
- Deutz DQC III-10 LA
- JASO DH-2
- MAN M 3775

- DTFR 15C100
- MTU Category 2.1
- Volvo VDS-4.5
- MACK EO-S 4.5, EO-O Premium Plus
- Ford WSS-M2C171-F1

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

### Typical Physical Characteristics

Properties			Method	Shell Rotella Fleet 15W-40
Kinematic Viscosity	@40°C	mm <sup>2</sup> /s	ASTM D445	115
Kinematic Viscosity	@100°C	mm <sup>2</sup> /s	ASTM D445	15.3
Dynamic Viscosity	@-20°C	mPa s	ASTM D5293	6 200
Viscosity Index			ASTM D2270	139
Total Base Number			ASTM D2896	10
Density	@15°C	kg/l	ASTM D4052	0.876
Flash Point (COC)			ASTM D92	236
Pour Point			ASTM D97	-35

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

This product 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 Safety Data Sheet, which can be obtained from <https://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.