



## Technical Data Sheet

- Improved Fuel Economy Performance

# Shell Rotella® FE 10W-30

## Premium Synthetic Blend Technology – Heavy duty diesel engine oil

Shell ROTELLA® FE 10W-30 (FA-4) heavy duty engine oil with Triple Protection Plus™ technology has been enhanced with synthetic base oils plus advanced additive technology to provide protection against wear, deposits and oil breakdown, PLUS improved fuel economy performance and resistance to breakdown under high temperatures.



### Performance, Features & Benefits

Shell ROTELLA® FE 10W-30 is designed for model year 2017 and beyond diesel engines that allow an API FA-4 quality oil. It is designed to provide hard working protection that adapts to your driving conditions resulting in excellent protection against wear, deposits, and oil breakdown PLUS:

- Improved fuel economy performance\*
- Demonstrated resistance to breakdown under high temperatures
- Protection to help prevent engine wear

The exclusive low ash formulation helps protect the exhaust catalysts and particulate filters found on 2017 (and beyond) on-highway low emission vehicles. Suitable for use on-highway engines requiring an API FA-4 diesel oil. Please refer to OEM manual to verify oil requirement for your equipment.

\*Compared to conventional SAE 15W-40 engine oil

- **Helps minimize/control oil consumption**

Shell ROTELLA® FE 10W-30 (FA-4) has been formulated to minimize/control oil consumption and help reduce need for oil top off.

- **Fuel economy capability**

The use of synthetic base oil components and low-HTHS design provides Shell ROTELLA® FE 10W-30 with the capability to improve cold starting and reduce fuel consumption, to help deliver savings, without compromising engine protection or durability. The lower viscosity also means increased fuel economy can be realized compared to a CK-4 SAE 15W-40 heavy duty engine oil.

- **Resistance to high temperature breakdown**

The advanced formulation delivers improved oxidation performance relative to CJ-4 quality oils, providing increased resistance to breakdown under high temperatures.

### Main Applications



Suitable for use in all 2017 and beyond on-highway engines requiring an API FA-4 diesel oil in this viscosity grade.

- **Low emission 2017 and beyond engine use**

Shell ROTELLA® FE 10W-30 meets the requirements of the major US engine manufacturers for low emission applications requiring an API FA-4 quality diesel oil.

### Specifications, Approvals & Recommendations

- API FA-4
- Cummins CES 20087
- Detroit Fluids Specification (DFS) 93K223
- JASO DH-2

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

## Typical Physical Characteristics

Properties			Method	Shell Rotella FE 10W-30
Kinematic Viscosity	@40°C	mm <sup>2</sup> /s	ASTM D445	66
Kinematic Viscosity	@100°C	mm <sup>2</sup> /s	ASTM D445	10
Dynamic Viscosity	@-25°C	mPa s	ASTM D5293	6 400
Viscosity Index			ASTM D2270	133
Total Base Number		mg KOH/g	ASTM D2896	10.2
Density	@15°C	kg/l	ASTM D4052	0.865
Flash Point (COC)		°C	ASTM D92	231
Pour Point		°C	ASTM D97	-45

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 your Shell representative.

### • 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