



## Technical Data Sheet

- Energy Saving / Improved Fuel Economy Performance
- Extreme Temperature Performance

# Shell ROTELLA® FE 5W-30

## Fully Synthetic Heavy Duty Diesel Engine Oil

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



### Performance, Features & Benefits

Shell Rotella FE 5W-30 is designed for both diesel engines allowing API FA-4 and gasoline engines allowing API SN Plus quality oils. 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:

- Better fuel economy performance\*
- Excellent extreme high/low temperature protection
- Protection to help prevent corrosion and deposits in key engine parts

The exclusive low ash formulation helps protect the exhaust catalysts and particulate filters found on 2017 (and beyond) on-highway low emission vehicles. 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 5W-30 has been formulated to minimize/control oil consumption and help reduce need for oil top off.

- **Fuel economy capability**

Shell Rotella FE 5W-30 has demonstrated 3.9% improvement in fuel economy (compared to conventional SAE 15W-40 oils) in real world field testing. It can help deliver savings in fuel economy without compromising engine protection or durability.

- **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.

- **Improved low temperature performance**

The advanced formulation of adaptive additive technology and synthetic base oils results in improved low temperature flow versus conventional SAE 15W-40 oils.

### Main Applications



Suitable for use in all 2017 and beyond on-highway engines requiring an API FA-4 diesel oil or in gasoline engines requiring an API SN Plus quality oil

### Specifications, Approvals & Recommendations

- API FA-4, SN Plus
- Cummins CES 20087
- Detroit Fluids Specification (DFS) 93K223
- DTFR 15C130
- Mack EOS-5
- Renault VI RLD-5
- Volvo VDS-5
- 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 5W-30
Kinematic Viscosity	@40°C	mm <sup>2</sup> /s	ASTM D445	60
Kinematic Viscosity	@100°C	mm <sup>2</sup> /s	ASTM D445	10
High Temperature High Shear Viscosity	@150°C	mPa s	ASTM D4741	2.9
Dynamic Viscosity	@-30°C	mPa s	ASTM D5293	5 400
Pour Point		°C	ASTM D97	-51
Flash Point		°C	ASTM D92	236
Sulphated Ash		%	ASTM D874	0.98
Density	@15°C	kg/m <sup>3</sup>	ASTM D4052	843

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 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.