



# Shell Rotella® T Multigrade

Heavy-duty motor oil with Triple Protection™ technology

Shell Rotella® T motor oil with Triple Protection™ technology is a unique, latest generation premium heavy-duty motor oil that meets or exceeds the service requirements of virtually all diesel engine manufacturers – for both the latest 2007-emission compliant and older engines. It is suitable especially for virtually all on-highway service applications, and is also suitable for off-highway applications.

## Performance Benefits

- **Meets or exceeds requirements of high performance diesel engines**  
Suitable for Low-emission diesel engines while providing excellent performance in older engines.
- **Improved wear protection**  
Provides significantly improved wear protection deposit, viscosity control and oxidation resistance compared to API CI-4 PLUS oils.
- **Maximize engine life.**  
Exceptional protection in control of valve train wear, piston ring and liner wear.
- **Demonstrated protection throughout oil drain**  
Demonstrated performance reserve throughout the oil drain interval for protection and lubrication.
- **Reduce fuel consumption**  
Compared to single-grade oils, can help lower operating costs.
- **Exceptional low-temperature properties**  
Flow properties helps speed cold starts.
- **Unique additive chemistry**  
With improved soot control and exclusive detergent system for outstanding engine cleanliness.
- **Warranty requirements**  
Product performance that meets or exceeds virtually all equipment manufacturer’s engine oil warranty requirements.

and diesel particulate filters using Ultra-Low Sulfur Diesel fuel (<15 ppm sulfur) (ULSD) and Low Sulfur Diesel (LSD).

- **Off-Highway applications**  
Where a premium quality engine oil is desired, where fuel sulfur levels are below 500 ppm.
- **Powered diesel equipments**  
Suitable for diesel powered equipment engines in all types of service where fuel sulfur levels are below 500 ppm.
- **Hard working diesel and gasoline engines**  
Engines used in pick-up trucks, sport-utility vehicles (SUVs), and mini-vans.
- **Suitable for use as a top-off oil.**  
In virtually all diesel engine applications.
- **Always follow the engine manufacturers**  
On viscosity grade and oil change interval.

## Specification and Approvals

Specifications and Approvals	SAE Viscosity Grade	
	10W-30	15W-40
API: CJ-4, CI-4 PLUS, CI-4, CH-4, CG-4, CF-4, CF	✓	✓
API: SM, SL, SJ, SH	✓	✓
ACEA: E7		✓
JASO: DH-2, MA		✓
Caterpillar: ECF-3, ECF-2, ECF-1A	✓	✓
Cummins: CES 20081		✓
Detroit Diesel: 93K218		✓
Deutz: DQC III-05		✓
Ford: WSS-M2C171-E	✓	✓
Mack: EO-O Premium Plus		✓
MAN: M3275		✓
MB – Approval: 228.3, 228.31		✓
MTU: Category 2		✓
Volvo: VDS-4		✓

## Applications



- **On-Highway applications**  
In all types of over-the-road service, including the latest emission controlled engines with EGR

**Advice**

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

**Protect the environment**

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

**Health & Safety**

Guidance on Health and Safety are available on the appropriate Material Safety Data Sheet, which can be obtained from your Shell representative.

**Typical Physical Characteristics**

Shell Rotella® T		
SAE Viscosity Grade	10W-30	15W-40
<b>Kinematic Viscosity</b> (ASTM D 445) @ 40 °C mm <sup>2</sup> /s 100 °C mm <sup>2</sup> /s	83 12.1	120 15.5
<b>Viscosity Index</b> (ASTM D 2270)	142	135
<b>Flash Point</b> (COC) °F, min (ASTM D92)	400	400
<b>Pour Point</b> °F (ASTM D 97)	-40	-35
<b>Neutralization No TBN</b> (ASTM D2896)	10.1	10.1
<b>Sulphated Ash</b> % wt (ASTM D874)	1.0 max	1.0 max
<b>12/1 Quarts</b>	5071353	5071356
<b>6/1 Gallons</b>	5071351	5071355
<b>2/2.5 Gallons</b>	--	5071352
<b>5 Gallons Pail</b>	--	5071354
<b>55 Gallons Drum</b>	5071335	5071338

These characteristics are typical of current production. While future production will conform to Shell's specifications, variations in these characteristics may occur. The information contained herein is subject to change without notice.