



# Lubricants Report



## Product Data Sheet from Shell Lubricants

PDS# 1.52.00

### SHELL ROTELLA® T6™

#### FULLY SYNTHETIC HEAVY DUTY DIESEL ENGINE OIL-EXTREME TEMPERATURE PERFORMANCE

LOW EMISSIONS

ENERGY SAVING

Shell Rotella® T6™ Energized Protection™ oil features Shell exclusive "Low-SAPS" additive technology reinforced with a novel and unique anti-wear system. Protective power is further enhanced through the use of synthetic base oil technology that increases additive activity to deliver low-viscosity fuel saving performance with no compromise in durability. Key benefits include; compatibility with exhaust emissions control systems, protection in extreme operating temperatures and fuel economy performance<sup>1</sup>.



**ENERGIZED PROTECTION**

*Adapting to your engine's changing needs*

#### PERFORMANCE BENEFITS

- **Improved Fuel Economy**  
Through use of Shell's most advanced technology Shell Rotella T6 oil offers enhanced fuel economy capability<sup>2</sup> that can save money in fuel consumption, without compromising engine protection or durability.
- **Improved Wear Performance**  
Provides a significantly increased level of protection against harmful engine wear when compared to previous generation API CI-4 plus engine oils.
- **Improved Deposit Control**  
The advanced multi-functional dispersant additives in combination with synthetic base oils provide an enhanced level of protection against the effects of soot, dirt and other contaminants.

<sup>1</sup> Compared to API CI-4 Plus oils

<sup>2</sup> eg compared to 15W-40 oils

- **Improved Heat Resistance**

Shell Rotella T6 Synthetic oil resists breakdown by heat to provide continuous protection throughout the service interval.

- **Emissions System Compatibility**

Advanced low-ash formulation helps control blocking of or poisoning of exhaust after-treatment devices, helping maintain vehicle emission compliance and engine fuel efficiency.

- **Protection in Extreme Climates**

Shell Rotella T6 Synthetic oil is based on freeflowing synthetic base oils that allow reliable pumping on start-up under cold climate conditions yet remain thick enough under high temperature operation to protect against wear.

- **Outstanding Shear Stability**

Shell Rotella T6 Synthetic oil resists viscosity loss through shear and will maintain optimal oil pressure in the engine.

### APPLICATIONS



- **For new and older diesel powered vehicles**

Suitable for new and older diesel powered vehicles from Class 8 tractor/trailers to heavy duty diesel pickups, delivery, utility, and school bus fleets.

- **Meets or exceeds diesel engine requirements**

Meets or exceeds requirements of API CJ-4, Cummins, Caterpillar, Detroit Diesel, Mack, Mercedes Benz, Volvo, Ford.

- **Gasoline engine applications**

Meets the requirements of API SM.

### SPECIFICATIONS AND APPROVALS

	SAE Viscosity Grade
	5W-40
API : CJ-4, CI-4 Plus, CI-4, CH-4, CG-4, CF-4, CF	<input checked="" type="checkbox"/>
API : SM, SL, SJ, SH	<input checked="" type="checkbox"/>
ACEA : E9	<input checked="" type="checkbox"/>
Caterpillar: ECF-3, ECF-2	<input checked="" type="checkbox"/>
Cummins; CES 20081	<input checked="" type="checkbox"/>
DDC: 93K218	<input checked="" type="checkbox"/>
Ford : WSS-M2C171-E	<input checked="" type="checkbox"/>
JASO: DH2, MA	<input checked="" type="checkbox"/>
MACK: EO-O Premium Plus	<input checked="" type="checkbox"/>
MB Approval: 228.31	<input checked="" type="checkbox"/>
Volvo VDS-4	<input checked="" type="checkbox"/>

## TYPICAL PHYSICAL CHARACTERISTICS

Rotella T6	
SAE Viscosity Grade	Rotella T6 5W-40
<b>Kinematic Viscosity</b> (ASTM D 445) @ 40°C mm <sup>2</sup> /s 100°C mm <sup>2</sup> /s	87 14.2
<b>Dynamic Viscosity</b> (ASTM D 5293) @ -30 °C mPa s	6000
<b>Total Base Number</b> mg KOH/g (ASTM D 2896)	10.6
<b>Sulphated Ash %</b> (ASTM D 874)	1.0
<b>Density @ 15 °C</b> kg/l (ASTM D 4052)	0.858
<b>Flash Point (COC)</b> °C (ASTM D 92)	224
<b>Pour Point</b> °C (ASTM D 97)	-45

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

## PRODUCT CODES:

		3 X 4L	18.9L pail	Drum	975L Tote	Bulk
5W-40	GSAP JDE	550019853 431-564-14	550019866 431-564-42	550019880 431-564-45	550019925 431-564-93	500004738 431-564-99

## HEALTH AND SAFETY

Shell Rotella T6 oils are unlikely to present any significant health or safety hazard when properly used in the recommended application, and good standards of industrial and personal hygiene are maintained.

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

For further guidance on Product Health & Safety refer to the appropriate Shell Product Safety Data Sheet. Take used oil to an authorized collection point. Do not discharge into drains, soil or water.

Visit [your nearest Shell Associate or Reseller](#) for more details.

Need more product information? Please contact the [Shell Customer Service Centre](#) at 1-800-661-1600 or e-mail us at [questions@shell.com](mailto:questions@shell.com)

MSDS requests? Please call 1-800-661-1600 or fax your request to (403) 691-3997  
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