



Shell Rotella® T Triple Protection™ 15W-40 (CJ-4)

- Low Emissions
- Extra Life - Improved Protection

Triple Protection Technology - Heavy Duty Diesel Engine Oils

Shell Rotella® T Triple Protection oil use the latest "Low-SAPS" additive technology to protect under the most severe conditions found in modern low emission engines. The protective power of the oil is enhanced through the use of high purity "Group II" base oils that provide increased additive activity. It delivers significant improvements in wear protection, deposit control and resistance to breakdown under high temperatures*.

The exclusive low-ash formulation helps protect the exhaust catalysts and particulate traps found on the latest low emission vehicles. Recommended by a wide range of OEMs, suitable for both the latest low-emissions and older model equipment.

* Compared to API CI-4 PLUS oils



ENERGISED PROTECTION
Adapting to your engine's changing needs

Performance, Features & Benefits

• Outstanding wear protection

Demonstrated over millions of miles of customer service, Shell Rotella® T Triple Protection provides significantly better wear protection than previous generation oils to maximize engine efficiency and prolong engine life.

• Exceptional engine cleanliness

Formulated with improved soot control and an exclusive detergent system to deliver outstanding piston and engine cleanliness.

• Emissions system compatibility

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

• Outstanding shear stability

A continued heritage of outstanding shear stability for viscosity control and optimal oil pressure in your engine.

• Exceptional low temperature properties

Helps speed cold starts.

• 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.

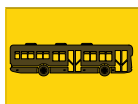
• Hard working diesel and gasoline engines

Suitable for use in pick-up trucks, sport-utility vehicles (SUVs), mini-vans and motorcycles.

Specifications, Approvals & Recommendations

- API: CJ-4, CI-4 PLUS, CI-4, CH-4, CG-4, CF-4, CF.
- API: SM, SL, SJ, SH
- ACEA: E9, E7
- JASO DH-2, MA, MA2
- Caterpillar: ECF-1A, ECF-2, ECF-3
- Cummins: CES 20081
- DDC: 93K218
- Deutz: DQC III-10 LA
- MACK: EO-O Premium Plus
- Ford: WSS-M2C171-E
- MAN: M3575
- MB Approval: 228.31
- MTU: Category 2.1

Main Applications



- Renault Trucks: RLD-3
- Volvo VDS-4

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

Typical Physical Characteristics

Properties			Method	Shell Rotella T Triple Protection (CJ-4)
SAE Viscosity Grade				15W-40
Kinematic Viscosity	@40°C	mm ² /s	ASTM D445	120
Kinematic Viscosity	@100°C	mm ² /s	ASTM D445	15.5
Viscosity Index			ASTM D2270	135
Density	@15°C	kg/l	ASTM D4052	0.879
Sulfated Ash		%	ASTM D874	1.0
Total Base Number		mg KOH/g	ASTM D2896	10.1
Flash Point (COC)			ASTM D92	204
Pour Point		°C	ASTM D97	-30

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

Shell Rotella T Triple Protection 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 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.