



## Technical Data Sheet

# Shell Rotella® T Triple Protection™ 10W-30 (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**  
Shell Rotella® T Triple Protection is 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**  
Exceptional low-temperature flow properties helps speed cold starts.

## Main Applications



- **Severe duty heavy duty diesel engines**  
Shell Rotella® T Triple Protection provides outstanding protection for virtually all heavy duty diesel engines, including engines with 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
- Caterpillar: ECF-2, ECF-3
- Ford: WSS-M2C171-E
- For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Help Desk, or the OEM Approvals website.

## Typical Physical Characteristics

Properties		Method	Shell Rotella T Triple Protection 10W-30
SAE Viscosity Grade		J300	10W-30
Kinematic Viscosity	@40°C mm <sup>2</sup> /s	ASTM D445	83
Kinematic Viscosity	@100°C mm <sup>2</sup> /s	ASTM D445	12.1
Viscosity Index		ASTM D2270	142
Density	@15°C kg/l	ASTM D4052	0.868
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. While 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 authorized collection point. Do not discharge into drains, soil or water.

## Additional Information

### ■ Advice

Product recommendations for applications and specifications not covered here may be obtained from your Shell representative.