



# Shell ROTELLA® T5 10W-30

- Better Fuel Economy Performance
- Improved Low Temperature Flow

## Synthetic Blend Technology Heavy Duty Diesel Engine Oil

Shell ROTELLA® T5 heavy duty engine oil with Triple Protection Plus™ technology has been enhanced with synthetic base oils plus advanced additive technology to protect against wear, deposits and oil breakdown, PLUS better low temperature flow and better fuel economy performance.



### Performance, Features & Benefits

Shell ROTELLA® T5 10W-30 heavy duty engine oil with Triple Protection Plus™ technology is formulated with Shell PurePlus Technology base oils. Shell PurePlus Technology is the patented process at Pearl GTL (Gas to Liquid) plant in Qatar which converts natural gas into a clear base oil, the main component of engine oils.

Shell PurePlus Technology base oils have a number of better intrinsic properties compared with traditional Group III base oils, as measured in fully formulated engine oils, including better (lower) volatility & better (lower) low-temperature properties.

- **Emissions system compatibility**

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

- **Fuel economy capability**

The use of synthetic base oil components provides Shell ROTELLA® T5 with the capability to improve cold starting and reduce fuel consumption and save money, without compromising engine protection or durability.

- **Improved engine cleanliness**

The advanced formulation delivers good engine cleanliness and protection against piston deposits ensuring engine and component reliability at extended oil drain intervals.

### Main Applications



- **Low emission engine use**

Shell ROTELLA® T5 meets the requirements of the major US and European engine manufacturers for low emission applications.

### Specifications, Approvals & Recommendations

- API CK-4, CJ-4, CI-Plus, CI-4, CH-4
- API SN
- ACEA E9
- Caterpillar ECF-3, ECF-2
- Cummins CES 20086, 81
- Detroit Fluids Specification (DFS) 93K222, 93K218
- Deutz DQC III-10 LA
- JASO DH-2
- Mack EOS-4.5, EO-O Premium Plus
- MAN M 3575
- MB-Approval 228.31
- MTU Category 2.1
- Volvo VDS-4.5, 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 T5 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
Dynamic Viscosity	@-25°C	mPa s	ASTM D5293	6000
Viscosity Index			ASTM D2270	141
Total Base Number		mg KOH/g	ASTM D2896	10.1
Sulfated Ash		%	ASTM D874	1.0
Density	@15°C	kg/l	ASTM D4052	0.864
Flash Point (COC)			ASTM D92	225
Pour Point		°C	ASTM D97	-42

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® T5 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.