

# Shell ROTELLA® T5 10W-30

#### **Technical Data Sheet**

- Better Fuel Economy Performance
- Improved Low Temperature Flow

# Premium Synthetic Blend Technology Heavy Duty Diesel Engine Oil

Shell ROTELLA® T5 heavy duty engine oil with Triple Protection Plus™ technology has been enhanced with premium 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 heavy duty engine oil with Triple Protection Plus™ technology has been enhanced with premium 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.

#### · 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 premium synthetic base oil components provides Shell ROTELLA® T5 with the capability to improve cold starting, reduce fuel consumption and save money, without compromising engine protection or durability. Shell ROTELLA® T5 Premium Synthetic Blend 10W-30 can provide fuel economy savings up to 2% compared to a conventional 15W-40

#### · 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-4 Plus, CI-4, CH-4
- 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
- Ford WSS-M2C171-F1

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  | mm²/s    | ASTM D445  | 83                      |
| Kinematic Viscosity | @100°C | mm²/s    | ASTM D445  | 12                      |
| Dynamic Viscosity   | @-25°C | mPa s    | ASTM D5293 | 6 000                   |
| 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 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.