

# Shell ROTELLA® T6 Multi-Vehicle 5W-30

#### **Technical Data Sheet**

- Energy Saving / Improved Fuel Economy Performance Mixed Fleet Applications
- Extreme Temperature Performance

Fully Synthetic Heavy Duty Diesel Engine Oil

Shell ROTELLA® T6 Multi-Vehicle with Triple Protection Plus™ technology heavy duty engine oil has been enhanced with synthetic base oils plus advanced additive technology to provide protection against wear, deposits and oil breakdown, PLUS improved fuel economy performance\* and excellent extreme high/low temperature performance.



#### Performance, Features & Benefits

Shell ROTELLA® T6 Multi-Vehicle 5W-30 is designed for both diesel engines allowing API CK-4 and gasoline engines allowing API SN quality oils. It is designed to provide hard working protection that adapts to your driving conditions resulting in excellent protection against wear, deposits, and oil breakdown PLUS:

- · Improved fuel economy performance\*
- · Excellent extreme high/low temperature protection.
- Protection to help prevent corrosion and deposits in key engine parts.

Shell ROTELLA® T6 Multi-Vehicle 5W-30 is a fully synthetic oil formulated with Shell PurePlus Technology base oils. Shell PurePlus Technology is the patented process at Pearl GTL (Gas to Liquid) 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) lowtemperature properties.

The exclusive low ash formulation helps protect the exhaust catalysts and particulate filters found on the latest low emission vehicles.

Shell ROTELLA® T6 Multi-Vehicle 5W-30 is suitable for use in all on or off highway engines requiring an API CK-4, CJ-4, CI-4 Plus, CI-4 or CH-4 diesel oil, and gasoline engines requiring an API SN quality oil in this viscosity grade.

\*Compared to conventional SAE 15W-40 engine oil

#### Helps minimize/control oil consumption

Shell ROTELLA® T6 Multi-Vehicle 5W-30 has been formulated to minimize/control oil consumption and help reduce need for oil top off.

# · Fuel economy capability

Shell ROTELLA® T6 Multi-Vehicle 5W-30 has demonstrated 2.8% improvement in fuel economy (compared to conventional SAE 15W-40 oils) in real world field testing. It can help deliver savings in fuel economy without compromising engine protection or durability.

#### · Resistance to high temperature breakdown

The advanced formulation delivers improved oxidation performance relative to CJ-4 quality oils, providing increased resistance to breakdown under high temperatures.

# Improved low temperature performance

The advanced formulation combined with Shell PurePlus Technology synthetic base oils results in improved low temperature flow vs conventional SAE 15W-40 oils.

#### **Main Applications**









Suitable for use in all on or off highway engines requiring an API CK-4, CJ-4, CI-4 Plus, CI-4 or CH-4 diesel oil in this viscosity grade or in gasoline engines requiring an API SN quality oil.

# Specifications, Approvals & Recommendations

- API CK-4, CJ-4, CI-4 Plus, CI-4, CH-4, SN
- ACEA E6
- Caterpillar ECF-3, ECF-2
- Cummins CES 20086,81
- Detroit Fluids Specification (DFS) 93K222, 93K218
- JASO DH-2

- Mack EOS-4.5, EO-O Premium Plus
- MB-Approval 228.51
- 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 T6 Multi Vehicle 5W-30
Kinematic Viscosity	@40°C	mm²/s	ASTM D445	75
Kinematic Viscosity	@100°C	mm²/s	ASTM D445	12.1
Dynamic Viscosity	@-20°C	mPa s	ASTM D5293	6200
Viscosity Index			ASTM D2270	159
Total Base Number		mgKOH/g	ASTM D2896	11
Density	@15°C	kg/l	ASTM D4052	0.845
Flash Point (COC)		°C	ASTM D92	239
Pour Point		°C	ASTM D97	-48

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® T6 Multi Vehicle 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 http://www.epc.shell.com/

#### · 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.