

# Shell **ROTELLA®** *T3 Fleet 15W-40*

Low Emissions

· Maintenance Savings

Fleet Multigrade Heavy Duty Diesel Engine Oils

Shell ROTELLA® T3 Fleet heavy duty engine oil has been formulated to provide reliable protection and performance to fleet and off-highway equipment, offering the convenience of a single oil suitable for a wide range of OEMs.

Shell ROTELLA® T3 Fleet oil uses the latest "Low-SAPS" additive technology to protect under the most severe engine conditions found in modern, low-emission engines.

## Performance, Features & Benefits

Shell ROTELLA® T3 Fleet engine oil has been designed to provide hard working protection that adapts to your driving conditions resulting in:

- Improved deposit protection versus prior formulation.
- Demonstrated resistance to breakdown under high temperatures.

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

## Helps control engine wear

Shell ROTELLA® T3 Fleet has been formulated to help protect against wear, and has been tested and proven through field trials and industry wear tests to maximize engine efficiency and help prolong engine life.

Helps control deposits in engines

Formulated for enhanced deposit protection, which exceeds API CK-4 deposit test requirements, to help keep engines cleaner over the oil drain interval.

Improved oxidation protection under extreme conditions

Shell ROTELLA® T3 Fleet delivers improved resistance to oil breakdown under extreme high temperature conditions versus prior CJ-4 performance specification.

## ■ Extended drain capable

Proven performance in standard oil drain intervals up to 50,000 miles and tested in field trials to show Shell ROTELLA® T3 Fleet demonstrates good TBN retention, low TAN increase, low wear metals, and low oxidation at drain.

 Always follow OEM recommendations when it comes to setting drain intervals for your specific operations and

# **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.

#### 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.

# Specifications, Approvals & Recommendations

- API CK-4, CJ-4, CI-4 Plus, CI-4, CH-4, SN
- Alison TES-439
- Caterpillar ECF-3, ECF-2
- Cummins CES 20086, 81
- Detroit Fluids Specification (DFS) 93K222, 93K218
- Deutz DQC III-10 LA
- JASO DH-2
- MAN M3575
- MB-Approval 228.31

## equipment.

- MTU Category 2.1
- Volvo VDS-4.5, VDS-4
- Mack EOS-4.5, EO-O Premium Plus
- ACEA E9
- 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 T3 Fleet 15W-40
Kinematic Viscosity	@40°C	mm²/s	ASTM D445	115
Kinematic Viscosity	@100°C	mm²/s	ASTM D445	15.3
Dynamic Viscosity	@-20°C	mPa s	ASTM D5293	6200
Viscosity Index			ASTM D2270	139
Total Base Number		mgKOH/g	ASTM D2896	10
Density	@15°C	kg/l	ASTM D4052	0.876
Flash Point (COC)		°C	ASTM D92	236
Pour Point		°C	ASTM D97	-35

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® T3 Fleet 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.