

#### **Technical Data Sheet**

# Shell ROTELLA® T5 15W-40

- Low Emissions
- Better Low Temperature Flow

Synthetic Blend Technology - Heavy duty diesel engine oil

Shell ROTELLA® T5 synthetic blend 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 extended drain capabilities\*.



#### Performance, Features & Benefits

Shell ROTELLA® T5 synthetic blend 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 extended drain capabilities\*.

## 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.

## Synthetic Blend

The use of synthetic base oil components provides Shell ROTELLA® T5 synthetic blend with the capability to improve cold starting and low temperature performance, without compromising engine protection or durability.

## Improved engine cleanilness

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

## ■ Low emission engine use

Shell ROTELLA® T5 meets the requirements of the major North American engine manufacturers for low emission applications.

## **Main Applications**









## Specifications, Approvals & Recommendations

- API CK-4, CJ-4
- Caterpillar ECF-3, ECF-2
- Cummins CES 20086, 20081
- Detroit Fluid Specification (DFS) 93K222, 93K218
- Volvo VDS-4.5, VDS-4
- Ford WSS-M2C171-F1
- MACK EOS-4.5, EO-O PremiumPlus

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Help Desk.

## **Typical Physical Characteristics**

Properties			Method	Shell ROTELLA T5 15W-40
Kinematic Viscosity	@ 40°C	mm²/s	ASTM D445	111.2
Kinematic Viscosity	@ 100°C	mm²/s	ASTM D445	14.9
Dynamic Viscosity	@ -20°C	mPa s	ASTM D5293	6200
Viscosity Index			ASTM D2270	138
Total Base Number		mgKOH/g	ASTM D2896	10
Sulphated Ash		%	ASTM D874	1.0

Properties			Method	Shell ROTELLA T5 15W-40
Density	@ 15°C	kg/l	ASTM D4052	0.866
Flash Point (COC)		٥C	ASTM D92	251
Pour Point		°C	ASTM D97	-37

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 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.

\* Compared to conventional SAE 15W-40.