

# Shell Rotella® T1 40 (CF/CF-2)

## **Technical Data Sheet**

Reliable Lubrication

## High Quality Heavy Duty Diesel Engine Oils

Shell Rotella<sup>®</sup> T1 Energized Protection<sup>™</sup> oils use well-proven performance additives to fight engine wear and prevent deposits, providing reliable lubrication and consistent performance. Suitable for day to day use in turbo and non-turbocharged older engines.

#### ENERGISED PROTECTION Adapting to your engine's changing needs

## Performance, Features & Benefits

#### Reliable Performance

Provide reliable all-year-round performance in the applications for which they are intended.

#### Proven durability

Shell Rotella<sup>®</sup> T1 provides excellent wear protection that promotes engine durability. It has a low ash content which minimizes the formation of deposits and keeps intake ports clean. It offers excellent rust and corrosion protection for critical engine parts.

### **Main Applications**



#### Heavy duty Diesel engines

Shell Rotella<sup>®</sup> T1 is suitable for mixed fleets combining large over the road diesel trucks with smaller diesel and gasoline-fuelled light trucks and passenger cars.

#### **Typical physical Characteristics**

Shell Rotella<sup>®</sup> T1 is suitable for heavy equipment used for construction, mining or quarry operations.

Shell Rotella<sup>®</sup> T1 40 is suitable for use in Detroit Diesel twocycle engines (Series 53, 71 and 92).

#### • Hydraulic and transmissions

Shell Rotella<sup>®</sup> T1 oils can be used in certain transmission and mobile hydraulic systems where the equipment manufacturer recommends use of monograde engine oils.

#### Specifications, Approvals & Recommendations

- API CF-2, CF
- Detroit Diesel Series 53,71,92

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

Properties			Method	Shell Rotella T1 40 (CF/CF- 2)
SAE Viscosity Grade				40
Kinematic Viscosity	@104°F	cSt	ASTM D445	123
Kinematic Viscosity	@212ºF	cSt	ASTM D445	13.0
Viscosity Index			ASTM D 2270	99
density	@15ºC	kg/l	ASTM D 4052	0.890
Total Base Number		mg KOH/g	ASTM D 2896	7.5
Flash Point (Cleveland Open Cup)		°F	ASTM D 92	437
Pour Point		٥F	ASTM D 97	-5.8

These Characteristics are typical of current production. While future production will conform to Shell's specification, variations in These Characteristics may occur.

#### Heath, Safety & Environment

Health and Safety

Shell Rotella T1 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 authorized collection point. Do not discharge into drains, soil or water.

## Additional Information

#### • Advice

Product recommendations for applications and specifications not covered here may be obtained from your Shell representative.