



Technical Data Sheet

- Low Emissions

Shell T2 HD 15W-40

Synthetic Blend Technology Heavy Duty Diesel Engine Oil

Shell T2 HD oil has been formulated to provide reliable protection and uses “Low-SAPS” additive technology to protect in modern, low-emission engines.

Performance, Features & Benefits

Shell HD T2 engine oil has been designed to meet the API CK-4 specification and provide:

- Performance in both on-highway and off-highway equipment.
- Backwards compatibility for older equipment requiring API CJ-4, CI-4 Plus, CI-4 or CH-4 diesel engine oil.
- The low ash formulation helps protect the exhaust catalysts and particulate filters found on the latest low emission vehicles.

- **Delivers performance required for API CK-4 specification**

Shell T2 HD has been formulated to meet the most recent API CK-4 specification. This specification requires proven performance in key tests around oxidation control, aeration control, and shear stability.

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.

Specifications, Approvals & Recommendations

- API CK-4, CJ-4, CI-4 Plus, CI-4, CH-4
- ACEA E9, E11
- Caterpillar ECF-3, ECF-2
- Cummins CES 20086, 81
- Detroit Fluids Specification (DFS) 93K222, 93K218
- Mack EOS-4.5, EO-O Premium Plus
- Volvo VDS-4.5

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

Typical Physical Characteristics

Properties			Method	Shell T2 HD 15W-40
Kinematic Viscosity	@40°C	mm ² /s	ASTM D445	115.6
Kinematic Viscosity	@100°C	mm ² /s	ASTM D445	15.3
Dynamic Viscosity	@-20°C	mPa s	ASTM D5293	6 200
Viscosity Index			ASTM D2270	138
Total Base Number		mgKOH/g	ASTM D2896	10
Density	@15°C	kg/l	ASTM D4052	0.875
Flash Point (COC)		°C	ASTM D92	237
Pour Point		°C	ASTM D97	-36

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 HD T2 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 <https://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.