

**Technical Data Sheet** 

Previous Name: Shell Donax TC 60

# Shell Spirax S4 CX 60

## High Performance Off-Highway Transmission and Final Drive Oil

Shell Spirax S4 CX 60 is designed to provide operators with trouble free operation and maximum reliability for the lifetime of the equipment. Spirax S4 CX 60 meets the demanding requirements of modern transmission, final drive and Oil immersed brakes fitted to heavy-duty off-highway equipment.

# **DESIGNED TO MEET CHALLENGES**

### Performance, Features & Benefits

### · Frictional performance and material Compatibility

Highly consistent and reliable friction performance when used with the advanced metallic and non-metallic materials found in modern systems. Minimal clutch slippage, smooth and quiet brake operation, and trouble-free transmission operation.

• Anti-Wear protection

The shear-stable SAE 60 viscosity grade gives the best protection of heavily loaded components particularly in highly loaded final drive systems.

• Low temperature Characteristics

Formulated to meet low temperature viscosity and fluidity requirements, providing superior protection during start-up and low operating temperature conditions.

- Optimum mechanical performance and long oil life
  Wide-ranging protection for critical components, such as
  bronze friction discs in powershift transmissions and gears
  in final drives and differential units.
- · Oxidation stability

Contains inhibitors to control oxidation and deposit formation. Protects both ferrous and non-ferrous metals from corrosion. Suppresses foaming, with improved flow properties at low temperatures enhances efficiency.

Main Applications

- Shell Spirax S4 CX 60 is recommended for use in heavy duty off-highway equipment produced by the world's leading manufaturers including; Caterpillar, Komatsu, Komatsu-Dresser and in transmissions manufactured by Eaton, Eaton Fuller, ZF, Dana, Rockwell among others.
- Powershift Transmissions
- Final drives
- Oil immersed brakes (Wet brakes)

### Specifications, Approvals & Recommendations

• Caterpillar Tractor : TO-4

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

Properties			Method	Shell Spirax S4 CX 60
SAE Viscosity Grade			SAE J 300	60
Kinematic Viscosity	@104°F	mm²/s	ISO 3104	295.7
Kinematic Viscosity	@212°F	mm²/s	ISO 3104	23.4
density	@15ºC	kg/m <sup>3</sup>	ISO 12185	912
Flash Point (COC)		°F	ISO 2592	419
Pour Point		°F	ISO 3016	21.2

### Typical physical characteristics

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 Spirax S4 CX 60 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 not covered here may be obtained from your Shell representative.