Technical Data Sheet

Formerly Known As: **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 amongst other:
- Powershift Transmissions
- Final drives
- Oil immersed brakes

### Specifications, Approvals & Recommendations

- Caterpillar Tractor : TO-4
- Suitable for use in applications where Allison C-4 type fluids are required.

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

### Typical Physical Characteristics

| Properties | | | Method | Shell Spirax S4 CX 60 |
|---|---|---|---|---|
| SAE Viscosity Grade | | | SAE J 300 | 60 |
| Kinematic Viscosity | @40°C | $mm^2/s$ | ISO 3104 | 295.7 |
| Kinematic Viscosity | @100°C | $mm^2/s$ | ISO 3104 | 23.4 |
| Density | @15°C | $kg/m^3$ | ISO 12185 | 912 |
| Flash Point (COC) | | °C | ISO 2592 | 215 |
| Pour Point | | °C | ISO 3016 | -6 |

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 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 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.