

# Shell Spirax S6 CFD ME 60

#### **Technical Data Sheet**

- · Long Oil Life
- Excellent Performance in alltemperatures (Multi-Season)

Premium performance off-highway final drive & axle oil

Shell Spirax S6 CFD ME 60 is a dedicated final drive and axle oil which offers significantly improved protection for gears and bearings in bevel gears, differentials, final drives and axles. It meets the Caterpillar FD-1 final drive axle oil (FDAO) specification. Spirax S6 CFD ME 60 has been developed for continuous use in extreme ambient temperatures in off-road vehicles.

# **DESIGNED TO MEET CHALLENGES**

#### Performance, Features & Benefits

- Long oil life with excellent oxidation stability
   Shell Spirax S6 CFD ME 60 oxidizes at a low rate, extending oil life and recommended drain intervals. Tested in the field with extra-long oil life. For off-highway trucks oil drain intervals can be extended up to 6000 hours, significantly longer than standard final drive and axle oils.
   (As prescribed in OEM manuals)
- Excellent performance in all temperature conditions (multiseasons)

Shell Spirax S6 CFD ME 60 is formulated to meet low temperature viscosity and fluidity requirements, providing excellent responsiveness during start-up and low operating temperature conditions as well as providing excellent protection at high operating temperatures.

Excellent anti-wear and corrosion performance
Shell Spirax S6 CFD ME 60 has proven performance ability
to extend gear and bearing life in all relevant laboratory
tests, including contact fatigue. Shell Spirax S6 CFD ME 60
provides excellent shear stability and gives the best
protection of heavily loaded components. Shell Spirax S6
CFD ME 60 provides excellent protection against rust and
copper corrosion. Contains inhibitors to control oxidation
and deposit formation. Protects both ferrous and nonferrous metals from corrosion. Suppresses foaming.

It can also be used in transmissions requiring TO-4 fluids that do not contain friction material. It is not recommended for final drives which contain brakes. It should also not be used in engines, transmissions or hydraulic systems.

- Axles
- Final drives

## Specifications, Approvals & Recommendations

Caterpillar FD-1 or where CAT FD-1 (FDAO) is specified.
 For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

# Compatibility & Miscibility

Shell Spirax S6 CFD ME 60 is fully compatible with all seal material employed in CAT equipment; and is also compatible with Shell Spirax S4 CX oils and oils meeting CAT TO-4.

Shell Spirax S6 CFD ME 60 should not be used in transmissions also containing friction materials (eg those with wet brakes or clutch materials). Use of Spirax S4 CX oils in those transmissions is recommended.

### **Main Applications**



 Shell Spirax S6 CFD ME 60 is recommended for use in all Caterpillar final drive & axles that currently specify the use of Cat FD-1.

# **Typical Physical Characteristics**

Properties			Method	Shell Spirax S6 CFD ME 60
SAE Viscosity Grade			SAE J300	60
Kinematic Viscosity	@100°C	mm²/s	ASTM D445	26.1
Density	@15°C	kg/m³	ASTM D1298	852
Flash Point (COC)		°C	ASTM D92	260
Pour Point		°C	ASTM D97	-42
Dynamic Viscosity (Brookfield)	@-20°C	mPa s	ASTM D2983	16 800
Dynamic Viscosity (Brookfield)	@-30°C	mPa s	ASTM D2983	52 000
Copper Corrosion	3h @100°C		ASTM D130	1B

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

## Health, Safety & Environment

#### · Health and Safety

Shell Spirax S6 CFD ME 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.