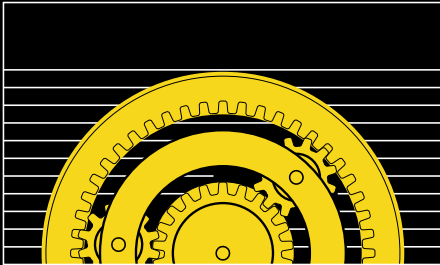


Final Drive and Axle Oil

SAE 50
SAE 60

For all Cat® Final Drives and Axles



Developed, tested and approved by Caterpillar, Cat Final Drive and Axle Oil (FDAO) ensures optimum life and performance when used as recommended in Cat final drives and axles. Cat FDAO is factory fill for Caterpillar machines.

Recommended use

Cat Final Drive and Axle Oil is recommended for use in all Caterpillar final drives and axles. This oil should not be used in compartments which contain friction material, unless FDAO has been specified. **NOT FOR USE IN ENGINE COMPARTMENTS.**

We can help you determine the right oil for your Cat machines, or you can refer to your “Operation and Maintenance Manual” or Service Publication SEBU6250 (“Caterpillar Machine Lubricant Recommendations”).

Typical Characteristics*

SAE Viscosity Grade	50	60
Manufacturer's Test		
CAT	FD-1	FD-1
ISO Viscosity Grade	220	320
Gravity, °API (ASTM D287)	26.2	25
Appearance (Visual)	Clear & Bright	Clear & Bright
Flash Point, °C (°F) (ASTM D92)	250 (482) min.	260 (500) min.
Pour Point, °C (°F) (ASTM D97)	-21 (-6) min.	-18 (0) min.
Viscosity (ASTM D445)		
cST @ 100°C	18.5	25.6
cST @ 40°C	206	338
Viscosity Index (ASTM D2270)		
Brookfield Viscosity (ASTM D2983)		
cP @ -10°C	—	75,000
cP @ -15°C	119,400	—
Sulfated Ash, % wt. (ASTM D874)	0.13	0.13
TBN (ASTM D2896)	3.1	3.1
Copper Strip (ASTM D130, 3 hrs. at 150°C)	1A	1A

* The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

Final Drive and Axle Oil

Unique formula for improved life and performance

Cat Final Drive and Axle Oil (FDAO) is formulated for use in Cat equipment final drives, axles, bevel gears and differentials in which gear and bearing loads and temperatures are high. It provides superior contact fatigue life to gears and bearings.

FDAO is designed specifically for protection of highly loaded components. It does not develop enough friction to satisfy the requirements of most brakes and clutches. It should not be used in clutch and brake compartments unless those compartments are specifically designated for FDAO use.

Cat FDAO also:

- Is compatible with TDTO oils and the seals for their compartments.
- Provides excellent protection against rust and copper corrosion.
- Minimizes foaming.
- Oxidizes at a low rate for improved oil life.

Fluid analysis for early detection

We recommend protecting your investment by using a scheduled fluid sampling program. Our S•O•SSM Fluid Analysis program is the ultimate detection and diagnostic tool for your equipment. Our S•O•S program helps you head off potential problems before they can lead to major failures and costly unscheduled downtime.

Proper use for health and safety

According to toxicology information, Cat Final Drive and Axle Oil has little or no adverse effects if handled and used properly. No special precautions are suggested beyond attending to good personal hygiene and avoiding prolonged, repeated skin contact. For more information, refer to the "Material Safety Data Sheet" SEFV1602.

Validation Tests

The performance of Cat FDAO equaled or exceeded that of Cat TDTO (an excellent lubricant) in the following tests:

- Timken Bearing Life
- Seal Compatibility
- FZG Gear Pitting
- FZG Scuffing
- D8N 4-Square
- Lubricant Parameter
- Pour Point
- Rust
- Copper Corrosion
- TO-4 Fluid Compatibility
- TO-4 Homeogeneity
- Foaming
- Flash Point
- Pumpability
- High-Temperature Shear
- KRL Shear
- Thermal Oxidation Stability
- High Torque, Low-Speed Axle