

G-Special FD-1 60



Main gears,
differentials



Final drives



High anti-wear
protection



High-quality mineral
base oils



Stable oil film



Improved extreme
pressure and anti-pitting
properties

G-Special FD-1 60 – transmission oil, developed for use in main gears, differentials and final drives of Caterpillar off-road equipment. Oil allows to achieve the maximum service life of transmission units and meets Caterpillar FD-1 requirements. It provides higher protection of equipment units as compared to oils of the Caterpillar TO-4 class.

Application



- Main gears, differentials and final drives of Caterpillar machinery.
- Dump trucks, bulldozers, pipelayers and other equipment where the Caterpillar FD-1 oil is applicable.
- Not recommended to use in equipment units with friction elements.
- Compatible with oils of the Caterpillar TO-4 level.

Advantages/Potential benefits

The **G-Special FD-1 60** oil with enhanced anti-wear and extreme pressure components allows to ensure high transmission efficiency under severe operation conditions:

Characteristics	Advantages/Potential benefits
Very high oil film stability	Keeps viscosity within the entire oil drain interval protecting the units in different operation modes - the maximum service life of gearboxes
Possibility to extend oil drain interval	Operates up to two times longer than the Caterpillar TO-4 oils - reduction of costs for lubricants (according to manufacturer requirements)
Enhanced extreme pressure and anti-wear properties	Maximum protection of gearwheels and bearings - additional maintenance savings
High corrosion and rust protection	Special components protect the structure elements
Low foaming tendency	Oil film retains - maximum protection of gearboxes
Excellent compatibility with sealing materials	The oil is inert to sealing materials and various elastomers, preventing leakages

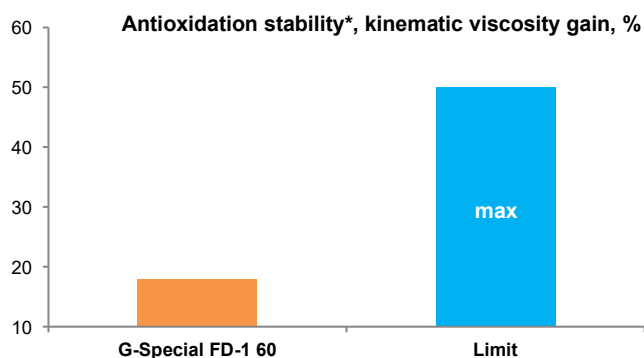
Typical physical and chemical characteristics

Parameters	Value	Method
Kinematic viscosity @100 °C, mm ² /s	25,31	ASTM D445
Brookfield dynamic viscosity @ -10°C, mPa*s	30000	ASTM D2983
Flash Point (COC), °C	270	GOST 4333
Pour point, °C	-18	GOST 20287
Density @15 °C, kg/m ³	900,2	GOST R 51069

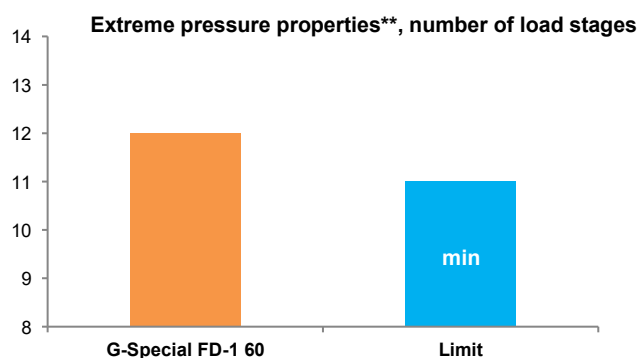
Specifications

- Caterpillar FD-1

G-Special FD-1 60 transmission oil exceeds the requirements of the main specifications according to tests:



High antioxidation resistance ensures efficient operation of the oil within a long oil drain interval



High load-carrying capability reliably protects gearwheels and bearings units under very high loads

*Test ASTM D5704 Oxidation Stability (100h)

**Test FZG D5182

The company's management system is certified in accordance with the international standards

ISO 9001



ISO 14001



ISO 45001

