



Refer to the Caterpillar Machine Fluids Recommendations Manual (SEBU 6250) to confirm specific temperature ranges for the application and for equipment/model specific fluid recommendations

DIESEL ENGINE OILS		
Product Description	Specifications	Special Use
CAT® DEO-ULS™ 10W-30 (Diesel Engine Oil – Ultra Low Sulfur)	Cat® DEO-ULS™ Diesel Engine Oil 10W-30 Optimum Performance and Protection for Engines and Emissions Reduction Systems Temperature Range -20°C to 40°C	<ul style="list-style-type: none"> Advanced Conventional Diesel Engine Oil 10W-30 formulated to exceed API-CJ-4 requirements in the most extreme conditions. Caterpillar® on- and off-highway engines equipped with aftertreatment systems (On-Highway 2007/2010) and Off-Highway Tier 4, Stage IIIB/IV, Cat® DEO-ULS™ exceeds the performance requirements of Caterpillar® ECF-3 (Engine Crankcase Fluid Specification) and the API CJ-4 and API SM categories. Reduced Engine Wear – Improved detergents keep engine components cleaner and better soot dispersion improves viscosity which controls engine wear. Minimized Deposits – Reduced oxidation breakdown and thermal degradation improves stability which minimizes the formation of deposits. Longer Protection – Specially designed additives deliver superior engine protection while supporting consistent emissions performance and extending the life of aftertreatment system components.
CAT® DEO-ULS™ 15W-40 (Diesel Engine Oil – Ultra Low Sulfur)	Cat® DEO-ULS™ Diesel Engine Oil 15W-40 Optimum Performance and Protection for Engines and Emissions Reduction Systems Temperature Range -10°C to 40°C	
CAT® DEO-ULS™ Cold Weather 0W-40 (Diesel Engine Oil – Ultra Low Sulfur, Cold Weather, Synthetic)	Cat® DEO-ULS™ Cold Weather 0W-40 Full Synthetic Diesel Engine Oil Temperature Range -40°C to 40°C	<ul style="list-style-type: none"> Cat® DEO-ULS™ Cold Weather was shown to reduce piston deposits by more than 30% and to have more than 80% better viscosity control than ECF-3 standards. Ultimate full synthetic performance for all conditions. Best level of protection, superior to mineral and semi-synthetic oils. Outstanding performance at extreme temperatures. Emissions systems protection. Ultimate engine protection – low temperature start up ultimate wear protection – best soot and viscosity control, extended drain technology and fuel economy improvement up to 3%.
CAT® DEO-ULS™ Cold Weather 5W-40 (Diesel Engine Oil – Ultra Low Sulfur, Cold Weather, Synthetic)	Cat® DEO-ULS™ Cold Weather 5W-40 Full Synthetic Diesel Engine Oil Temperature Range -40°C to 40°C	
NATURAL GAS ENGINE OILS		
Product Description	Specifications	Special Use
CAT® NGE0 Advanced 40™ (Natural Gas Engine Oil)	Cat® NGE0 Advanced 40™ Temperature Range -10°C to 50°C	<ul style="list-style-type: none"> Cat® NGE0 Advanced 40™ is an SAE 40 viscosity grade. The oil is designed to specifications that provide superior lubrication performance in Cat® natural gas engines. Cat® NGE0 Advanced 40™ is formulated from select base stocks blended with special additives to provide: reduced piston and cylinder liner wear, increased spark plug and valve life, corrosion protection.
CAT® NGE0 Ultra 40™ (Natural Gas Engine Oil)	Cat® NGE0 Ultra 40™ Temperature Range -10°C to 50°C	<ul style="list-style-type: none"> Cat® NGE0 Ultra 40™ is an SAE 40 viscosity grade and represents the highest tier of gas engine oil offered by Caterpillar®. This oil provides engine protection similar to NGE0 Advanced 40™ while also using an advanced base stock and anti-oxidation technology to extend drain intervals even further. Cat® NGE0 Ultra 40™ is recommended for all Cat® gas engines, and specifically should be used for 3516H series engines to ensure satisfactory oil life.

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GEAR, TRANSMISSION, FINAL DRIVE FLUIDS	Temperatures Listed Are Operating See Fluids Manual (SEBU 6250-20) For Specifics	
Product Description	Specifications	Special Use
CAT® Gear Oil 80W-90	Cat® GO Gear Oil 80W-90 Temperature Range -20°C to 40°C	<ul style="list-style-type: none"> • Provides excellent stability under higher temperatures and superior performance under low temperatures. • Protects against rust and corrosion. Included “EP” extreme pressure additives. For use in manual transmissions, axles, final drives and systems requiring API GL-5 oil.
CAT® SATO (Special Application Transmission Oil)	Cat® SATO Special Application Transmission Oil Factory Fill Medium Wheel Loaders Synthetic Blend Temperature Range -30°C to 40°C	<ul style="list-style-type: none"> • A high performance transmission oil designed for Cat® Medium Wheel Loaders to ensure transmission life and performance. • Designed especially for use in Advanced Powertrain Transmissions in 966K XE, 966M XE, 972M XE machines. Also suitable for use in traditional powershift transmissions for medium wheel loader models 950M, 962M, 966M, 972M, 980M, 982M.
CAT® TDTO™ 10W (Transmission & Drive Train Oil)	Cat® TDTO™ Transmission/Drive Train Oil 10W Temperature Range -20°C to 25°C for Transmissions and 46°C for Hydraulics	<ul style="list-style-type: none"> • Transmission and drive train oil for Cat® transmissions, final drives and wet brake compartments. • Cat® TDTO™ is developed, tested and approved by Caterpillar® to meet the same high standards as Genuine Cat® Parts.
CAT® TDTO™ 30 (Transmission & Drive Train Oil)	Cat® TDTO™ Transmission/Drive Train Oil 30W Temperature Range -5°C to 40°C	<ul style="list-style-type: none"> • Factory Fill – Used as standard factory fill for Cat® machine compartments where TO-4 oils are specified. • Longer Clutch Life – Prolongs clutch disc life up to 45%. • Optimum Wear Life – Ensures long life and excellent performance for gears, bearings and friction disc material.
CAT® TDTO™ 50 (Transmission & Drive Train Oil)	Cat® TDTO™ Transmission/Drive Train Oil 50W Temperature Range 10°C to 50°C	<ul style="list-style-type: none"> • System-Matched Formula – Engineered as an integral part of Cat® power shift transmissions, most wet brake compartments, and hydrostatic systems.
CAT® TDTO™ TMS (Transmission & Drive Train Oil)	Cat® TDTO-TMS™ Factory Fill for CAT® D7E Synthetic Blend Extended Drain Intervals 6,000 hours or more with SOS Temperature Range -20°C to 43°C	<ul style="list-style-type: none"> • Cat® transmissions, wet brakes, and final drive compartments that must operate in wide temperature ranges. • Engineered with semi-synthetic base oils providing longer component life, wider operating temperature range, optimal wear life and fewer oils and extended oil changes.
CAT® TDTO™ Cold Weather 0W-20 (Transmission & Drive Train Oil, Cold Weather, Synthetic)	Cat® TDTO™ Cold Weather 0W-20 Synthetic Blend Final Drive & Axle Oil Synthetic Extended Drain Intervals 6,000 hours or more with SOS Temperature Range -40°C to 10°C for Transmissions and 41°C for Hydraulics	<ul style="list-style-type: none"> • Cat® TDTO™ Cold Weather is a synthetic lubricant blend that provides superior performance and protection in transmissions, torque converters, final drives, hydraulics, and/or wet brakes at temperatures down to -40°C. • The special formulation creates optimal friction performance and controls transmission slippage while eliminating clutch glazing. Cat® TDTO™ Cold Weather has excellent compatibility with all materials used in Cat® machines, including friction materials, seals, and elastomers. • The outstanding thermal stability and oxidation resistance gives Cat® TDTO™ Cold Weather long drain intervals.
CAT® FDAO™ 60 Final Drive & Axle Oil	Cat® FDAO™ Final Drive and Axle Oil 60WT Extended Drain Intervals 4,000 hours or more with SOS Temperature Range -40°C to 40°C	<ul style="list-style-type: none"> • Cat® FDAO™ is developed, tested and approved by Caterpillar® to meet the same high standards as Genuine Cat® Parts. • Factory Fill – Used as standard factory fill for Cat® off-highway trucks and large track-type tractors. • Extended Drain Intervals – Allows for double-length drain intervals in off-highway truck final drives, as compared to TO-4 commercial oils. • Minimal Foaming – Formulated to protect against the damaging effects of air. Preferred lubricant for Cat® off-highway truck front wheels, differentials and final drives. • Preferred lubricant for Cat® large track-type tractor, pipelayer, and track skidder final drives (steel-tracked machines with elevated final drives except the D5M, D6M and 561M).
CAT® FDAO™ Synthetic (Final Drive & Axle Oil, Synthetic)	Cat® FDAO™SYN™ Final Drive & Axle Oil Synthetic Extended Drain Intervals 6,000 hours or more with SOS Temperature Range -40°C to 40°C	<ul style="list-style-type: none"> • Preferred lubricant for Cat® off-highway truck and D11R carrydozer front wheels, differentials and final drives operating under high load factors • Compatible with Cat® final drives and axles that previously specified Cat® FDAO™ or TO-4 lubricants and do not contain friction material. • Longer Bearing and Gear Life – Has demonstrated the capability to double bearing life and quadruple gear life when compared to TDTO and TO-4 oils used in off-highway truck final drives.

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HYDRAULIC FLUIDS	Temperatures Listed Are Operating Manual (SEBU 6250-20) For Specifics	
Product Description	Specifications	Special Use
CAT® Bio HYDO™ Advanced	<p>Cat® Bio HYDO™ Advanced Synthetic Oil Extended Drain Intervals 6,000 hours or more with SOS Temperature Range -30°C to 45°C</p>	<ul style="list-style-type: none"> • Long Life – Cat® Bio HYDO™ Advanced outperforms the previously recommended Cat® Bio HYDO™ and competitive brands. In fact, Cat® Bio HYDO™ Advanced performance is comparable to premium mineral-based hydraulic oils. Like Cat® HYDO™ Advanced, Cat® Bio HYDO™ Advanced can be taken up to a 6,000 hour drain interval with Cat® S•O•S™ Fluid Analysis. • Biodegradable – Readily biodegradable and non-toxic, so that it can be used in environmentally sensitive areas without concern. • Wide Temperature Range Protection – Maintains consistent wear protection throughout the entire temperature range, -30°C to 45°C. From cold start through to operating temperature, Cat® Bio HYDO™ Advanced gives you the best system protection. • Improved Flow Through Filters – Retains its ability to flow through filters even when water is present. • Seal Compatibility – Cat® Bio HYDO™ Advanced is highly compatible with the seals used in Cat® Hydraulic systems. This means fewer leaks and lower maintenance costs. • Component Protection – Specially developed additives form a protective layer on wear surfaces, reducing wear in hydraulic pumps and other components. Cat® BIO HYDO™ Advanced provides excellent corrosion protection to steel and bronze components, even at high temperatures.
CAT® HYDO™ Advanced 10	<p>Cat® HYDO™ Advanced 10 Extended Drain Intervals 6,000 hours or more with SOS Temperature Range -15°C to 40°C</p>	<ul style="list-style-type: none"> • Enhances, Long Lasting Anti-Wear Protection – Specially developed additives form a protective layer on the wear surfaces, reducing component wear in high-pressure piston, vane, and gear hydraulic pumps. • Holds Water in Dispersion – Contains emulsifiers specifically designed to disperse water. Cat® does not recommend oils that “separate,” “shed,” or “release” water. Separated water drawn through the hydraulic system can damage pumps and other components. If this water freezes, it can cause serious damage. • Backward Compatibility – The only hydraulic oil you need to stock for your maintenance operations.
CAT® HYDO™ Advanced 20	<p>Cat® HYDO™ Advanced 20 Extended Drain Intervals 6,000 hours or more with SOS Temperature Range -5°C to 50°C</p>	<ul style="list-style-type: none"> • Improved Filtration Properties – Special detergent dispersants keep components clean and improve transport of contaminants through the filters. • Improved Corrosion Protection – Protects metal surfaces from rust. • Faster Air Release – Rapid air separation preventing cavitation. • Wide Temperature Range Protection – Maintains consistent wear protection – designed to flow readily at cold temperature start up, and maintains excellent wear protection at operating temperatures. • Improved Oil Stability – 250% increase in oxidation stability per ASTM D943. Improved oil stability and wear protection.
CAT® Multipurpose Tractor Oil	<p>Cat® Multipurpose Tractor Oil Temperature Range -25°C to 100°C</p>	<ul style="list-style-type: none"> • Recommended for older Cat® Backhoe Loader rear axles and Cat® Challenger™ Tractors. • Improved Braking and Clutching – Where approved for use, enhances control and extends life in clutches and wet brakes. • Lower Maintenance Costs – Exceptional anti-wear properties extend equipment and component lives. • Cold-Weather Operation – Can be used in temperatures as low as -25°C. • Simplified Maintenance – Can be used in multiple compartments, reducing inventory and the chance of using the wrong oil. • Long-Lasting Performance – Offers high thermal stability and oxidation resistance for long service life in severe applications. • Axle for the Series 500 Vibratory Soil Compactor models with the D suffix or lower.