

Cat[®] TDTO[™] Cold Weather



Best Performance and Protection for Cold Weather Applications

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°F (-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.

Benefits

Performance

- Easier Engine Starts
- Greater Machine Rim Pull and Breakout Force
- Long Drain Intervals

Protection

- Promotes Transmission Durability
- Increased Clutch, Gears, and Bearing Life
- Optimal Cold Weather Friction Performance



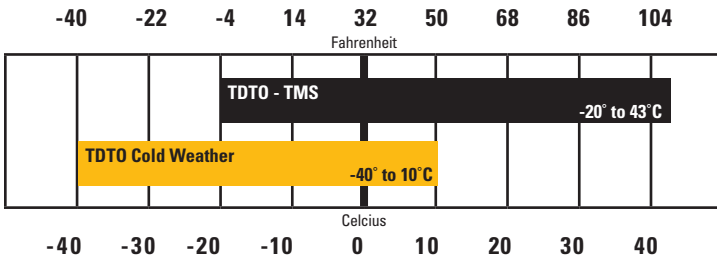
CATERPILLAR[®]

Cat® TDTO™ Cold Weather

Improved Engine Starting Ability¹

In very cold weather, transmission oil can create considerable drag on the engine during startup which causes hard starts. The low temperature performance of Cat® TDTO™ Cold Weather makes for easier engine starts even when the thermometer dips far below freezing.

Recommended Temperature Ranges for Transmissions²



Typical Characteristics³

SEA Viscosity Grade	0W-20
Gravity @ 16° C (60° F)	
API (ASTM D287)	30.8
Specific	.872
Flash Point @ °C (ASTM D92)	170
Pour Point @ °C (ASTM D97)	-54
Kinematic Viscosity (ASTM D445)	
cSt @ 40°C	32.9
cSt @ 100°C	7.5
Brookfield Viscosity (ASTM D2983)	
cP @ -40°C	7000
Total Base Number (TBN) (ASTM D664)	7.9
Low Temperature Pumpability @ °C (ASTM D4684)	-54
Phosphorus, ppm	1060
Zinc, ppm	1250
Calcium, ppm	3000
Sulfated Ash, % wt.	1.2

¹ Cat® TDTO™ Cold Weather should not be used in engines. Its use could cause excessive piston deposits and loss of oil control.

² For detailed information regarding recommended temperature ranges, consult the Operation and Maintenance Manual and SEBU 6250.

³ 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.

Applications

Cat TDTO Cold Weather is the preferred transmission and drive train oil for low temperature operation in certain applications and can be used in wet brakes and hydraulics. Refer to SEBU6250 for more information.

Cat TDTO Cold Weather is also recommended for applications with the following original equipment manufacturer requirements:

- Caterpillar TO-4
- Allison C-4
- Komatsu Micro-Clutch
- Vickers 35VQ25

Long Drain Intervals

With the use of Cat S•O•SSM Oil Analysis and Cat Filters, Cat TDTO Cold Weather is capable of long change intervals.

Health and Safety

For information on proper use for health, safety, and environment, please refer to the Material Safety Data Sheet (MSDS). Read and understand the MSDS before using this product. Always observe good hygiene measures. For a copy of the MSDS, contact us or visit the web at www.catmsds.com.

CAT® DEALERS DEFINE WORLD-CLASS PRODUCT SUPPORT.

We offer you the right parts and service solutions, when and where you need them.

The Cat Dealer network of highly trained experts can help you maximize your equipment investment.

