# KLONDIKE TDTO-4 Transmission / Drive Train Oils: SAE 10W, 30, 50, All Season Syn Blend, Arctic Full Syn



#### **PRODUCT DESCRIPTION**

KLONDIKE TDTO-4 Transmission / Drive Train Oils are specialized, advanced fluids designed for the needs of heavy duty equipment systems in mobile and stationary equipment where Caterpillar TO-4 or Allison C-4 fluids are specified. These fluids provide excellent operating and maintenance benefits across a broad temperature range for increased efficiency, performance, and component protection.

#### **APPLICATIONS**

KLONDIKE TDTO-4 Transmission / Drive Train Oils are recommended for use in Caterpillar and other competitive brands of heavy duty off-road equipment in applications where fluids meeting TO-4 requirements are specified. Typical applications include, but are not limited to, powershift and hydrostatic transmissions, torque converters, wet brake mechanisms, differentials, final drives, and hydraulic systems. Other applications include manual transmissions where API GL-3 or Allison C-4 fluids are specified.











#### **FEATURES AND BENEFITS**

KLONDIKE TDTO-4 Transmission and Drivetrain fluids are blended with premium paraffinic base stock and high performance additives for long term, trouble free service in high-torque, high-output applications operating under heavy loads and severe stress.

KLONDIKE TDTO-4 Transmission and Drivetrain fluids deliver outstanding friction retention and anti-wear protection, minimizing clutch slippage for complete power transfer. Advanced formulation maximizes the life of clutch materials, eliminates wet brake chatter, protects components against wear, prevents friction surface glazing, and resists high temperature oxidation.

KLONDIKE TDTO-4 All-Season Syn-Blend Transmission and Drivetrain fluid is specially formulated to deliver exceptional multi-viscosity, all season performance. This advanced fluid meets the requirements of CAT TO-4M and is formulated to meet SAE 10W-30 viscosity. Using All-Season Syn-Blend reduces seasonal fluid changes for improved fluid economy.

KLONDIKE TDTO-4 Arctic Supreme Full Synthetic Transmission and Drivetrain fluid is specially formulated with Klondike's advanced 'Arctic Performance Technology' to deliver outstanding protection and performance in cold temperature operating conditions. Synthetic base stock ensures maximum component protection and offers extended drain capability. Specialized additives offer outstanding reliability and performance in ultralow temperature applications ensuring maximum productivity in extreme conditions.

KLONDIKE TDTO-4 Transmission and Drivetrain fluids deliver value through the following benefits:

- Friction material compatibility full fluoroelastomer compatibility ensures maximum friction disc life and delivers consistent, reliable performance.
- **High oxidation stability** resists heat induced oil thickening and deposit formation in high pressure, high temperature service applications
- Outstanding anti-wear premium anti-wear additives minimize metal to metal contact even in high pressure operation
- Increased efficiency the right fluid maximizes equipment reliability and minimizes maintenance costs.

## **KLONDIKE TDTO-4 Transmission / Drive Train Oils**

#### **SPECIFICATIONS AND APPROVALS**

KLONDIKE TDTO-4 Transmission / Drive Train Oils are recommended for use where the following specifications are required:

- Allison C-4 (off-road)
- CAT® TO-2 (obsolete)
- CAT® TO-4
- CAT® TO-4M (All Season Synthetic Blend only)
- CAT® HYDO Advanced 10 (SAE 10W only)
- Komatsu Micro Clutch
- Komatsu Equipment

- Sundstrand Hydrostatic
- Vickers M2950-S, 35VQ25
- DANA Powershift (where TO-4 is referenced)
- Tremac/TTC (where TO-4 is referenced)
- EATON Fuller (where TO-4 is referenced)
- **ZF** TEML03

Always follow equipment manufacturer's recommendations for proper fluid type and viscosity grade. Never use KLONDIKE TDTO-4 Transmission and Drivetrain fluid as engine crankcase oil.

#### **TYPICAL TECHNICAL PROPERTIES**

PROPERTY	TEST METHOD	KLONDIKE				
		SAE 10W	SAE 30	SAE 50	ALL SEASON SYN BLEND	ARCTIC FULL SYN
Viscosity @ 40°C (cSt)	ASTM D445	38.2	102	215	104	32.9
Viscosity @ 100°C (cSt)	ASTM D445	6.1	11.6	19.1	14.2	7.4
Viscosity Index	ASTM D2270	104	102	100	140	202
Flash Point °C	ASTM D92	200	205	210	225	255
Pour Point °C	ASTM D5950	-34	-29	-27	-41	-60
Zinc, wt %	ASTM D4927	0.124	0.124	0.124	0.12	0.12
Sulfated Ash, wt %		1.2	1.2	1.2	1.2	1.2
TBN	ASTM D2896	7.1	7.1	7.1	7.2	7.2
Gravity; °API	ASTM D4052	29.3	27.0	26.0	31.0	30.5
Specific Gravity @ 60°F	ASTM D4052	0.856	0.875	0.886	0.852	0.855
Foam Seq. I / II / III	ASTM D 892	PASS	PASS	PASS	PASS	PASS

All stated physical properties are typical of standard production and may vary.

### **KLONDIKE TDTO-4 Transmission / Drive Train Oils**

#### **HEALTH AND SAFETY**

This product is not expected to have adverse health implications when used for its intended application. For detailed information on safe handling of this product, refer to its Material Safety Data Sheet (MSDS). To obtain an MSDS on this or any other KLONDIKE product, please visit www.klondikelubricants.com or call 1-877-293-4691. When disposing of used product, be responsible to the environment.

#### **BRAVING THE FORCE OF MOVEMENT**

KLONDIKE stands for robust, reliable, high quality products tailored to suit the requirements of the on- and off-road heavy duty, automotive and industrial markets. Our solutions span from trend-setting retail lubricants through small-batch custom formulations to large bulk orders ready for immediate delivery.

The extensive KLONDIKE product range includes premium oils, lubricants, greases, chemicals and specialty fluids formulated with virgin base oils and protective inhibitors. Designed to handle the most extreme climates and operating conditions, the KLONDIKE products protect and extend the life of your equipment, optimize performance and improve productivity while meeting and exceeding industry standards and specifications.

#### **KLONDIKE Lubricants Corporation**

Toll-free 1-877-293-4691

info@klondikelubricants.com www.klondikelubricants.com