

KLONDIKE Diesel Extended Life Antifreeze/Coolant



PRODUCT DESCRIPTION

KLONDIKE Diesel Extended Life Antifreeze/Coolant is an advanced, ethylene glycol based, multi-purpose, extended life coolant primarily designed for use in heavy duty diesel engines as well as light duty applications.

APPLICATIONS

KLONDIKE Diesel Extended Life Antifreeze/Coolant meets the requirements specified by ASTM D4985 for basic heavy duty applications as well as ASTM 6210 for fully formulated antifreeze/coolants.

Typical applications include:

- Heavy duty engines running on all types of fuel where OEM recommends an extended life coolant containing nitrites.
- Mixed fleets containing on and off road equipment; heavy or light duty.
- Stationary engines applications requiring minimum maintenance and maximum reliability.
- Marine applications where freeze protection and nitrite containing chemistry is recommended.



FEATURES AND BENEFITS

KLONDIKE Diesel Extended Life Antifreeze/Coolant is a virgin ethylene glycol based product blended with a proprietary HOAT (hybrid organic acid technology) high performance additive package. This low silicate coolant formulation is phosphate, nitrate, borate, and amine free and is designed for use in all types of engines, particularly those containing aluminum alloys. KLONDIKE's proven performance technology provides antifoam properties as well as protection against rust and corrosion for all cooling system materials. HOAT inhibitor technology ensures maximum service life and full compatibility with other extended life and conventional coolants with no adverse effect making this formulation compatible for use in a vast selection of heavy duty engine applications as a top-up or complete replacement fluid. KLONDIKE Diesel ELC is precharged with a minimum of 2400 ppm nitrite content. This additive content ensures this product meets ASTM D6210 for heavy duty antifreeze/coolant and will effectively control wet sleeve liner pitting, cavitation, and corrosion. Formula also includes ingredients to disperse minor oil leakage, prevent fouling, control hot surface scaling. Cooling systems filled and maintained exclusively with KLONDIKE Diesel ELC may exceed 1,000,000 km's/8 years of on-road service, 15,000 hours/8 years of off-road service, and 32,000 hours/8 years of stationary engine service when a formal antifreeze/coolant monitoring and maintenance program is followed.

Mixes readily with clean tap water.

KLONDIKE Diesel Extended Life Antifreeze/Coolant is available in concentrate and 50/50 prediluted versions for convenience and versatility. Other custom blends are available upon request.

KLONDIKE Diesel Extended Life Antifreeze/Coolant delivers value through the following benefits:

- **Wide application range** — maximum protection across a vast range of heavy and light duty applications.
- **Long service life** — 1,000,000 km or 15,000 hours of premium protection.
- **All-metal protection** — provides excellent protection to all cooling system components including aluminum. Maximum water pump and fluid seal life.
- **Compatibility** — compatible with most major brands of extended life and conventional coolant technology.



KLONDIKE Diesel Extended Life Antifreeze/Coolant

SPECIFICATIONS AND APPROVALS

KLONDIKE Diesel Extended Life Antifreeze/Coolant meets or exceeds the requirements of (but is not limited to) the following

- **ASTM D3306**
- **ASTM D4340**
- **ASTM D4985**
- **ASTM D6210**
- **TMC of ATA RP-329, 302A-1**
- **SAE J1034/J1941**
- **CAT EC-1**
- **CAT ELC (with molybdate added as per spec)**
- **Cummins CES 14603**
- **Detroit Diesel 7SE298, 93K217**
- **Ford WSS-M97B51-A1**
- **Freightliner 48-22880**
- **GM 1899M**
- **ISUZU Truck**
- **JOHN DEERE H24A2/H24C2**
- **J.I. Case**
- **Komatsu**
- **MACK SB232-014, 014 GS 17004**
- **MTU MTL 5048/5049**
- **Mercedes 325.0, 325.3, DBL7700**
- **NAV/INT B-1 (type III) with molybdate added as per spec)**
- **New Holland**
- **PACCAR CS0185**
- **VOLVO 1286083, 014 GS 17009**

Meets the phosphate-free requirements of European OEM's.



KLONDIKE Diesel Extended Life Antifreeze/Coolant

TYPICAL TECHNICAL PROPERTIES

PROPERTY	TEST METHOD	CONVENTIONAL
Specific gravity	ASTM D1122	1.110 – 1.125
Nitrite	ASTM D 5827	2400 ppm, min
Chloride	ASTM D3634	25 ppm, max
Boiling Point, undiluted	ASTM D1177	162°C/325°F min.
Boiling Point, 50% V/V	ASTM D1120	107°C/226°F min.
Freeze Point, 50% V/V	ASTM D1177	-36.7°C/-34°F min.
Ash content, mass %	ASTM D1119	2.5 max
pH, 50% V/V	ASTM D1287	9.5 – 10.5
Reserve alkalinity	ASTM D1121	6 min
Water, mass %	ASTM D1123	2.8 max
Foaming	ASTM D1881	150 mi vol., max.
5 sec. break, max.	ASTM D1881	150 mi vol., max.
Effect on non-metals		No adverse effect
Effect on vehicle finish		No adverse effect
Color		Red

*Reserve alkalinity (RA) is a term used to indicate the amount of alkaline inhibitors present in an antifreeze formulation. It is incorrect to relate a high RA number with high-quality antifreeze. Many antifreeze formulations contain new inhibitor technology which gives added protection to certain metals but does not raise the RA number.

% ANTIFREEZE	FREEZING POINT		BOILING POINT*	
	°F	°C	°F	°C
40%	-9	-24.4	220	104
50%	-34	-36.7	264.9	129.4
60%	-62	-52.2	270.0	132.2
70%	-84	-64.4	275.0	135.0
*Boiling point shown using conventional 15 psi radiator cap.				

Technical Notes:

- KLONDIKE Diesel Extended Life Antifreeze/Coolant is an advanced, extended life antifreeze/coolant. Dilution with other coolant chemistry may affect performance characteristics and expected service life.
- This product contains bittering agent. Bittering agent is a flavor aversive that may help reduce the accidental ingestion of this product
- Antifreeze/coolant concentrate must be mixed with clean water for maximum performance.
- KLONDIKE recommends 50/50 solution of antifreeze/coolant and clean water to meet stated performance characteristics. For maximum protection against freezing in extremely cold areas, a 60-70 percent solution may be used. Concentrations greater than 70 percent are not recommended.
- This product contains nitrites. Always follow OEM antifreeze/coolant recommendations.
- NOTE: Used antifreeze coolant in most jurisdictions is not hazardous unless it contains more than 5 ppm of lead. Never dispose of by dumping into a storm sewer or onto the ground. Instead, contact your local municipality for instructions on where and how to properly dispose of this coolant and protect our environment.



KLONDIKE Diesel Extended Life Antifreeze/Coolant

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

