

PRODUCT DESCRIPTION

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

APPLICATIONS

KLONDIKE Diesel Precharged 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 fully formulated, phosphate-free coolants are recommended
- 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 Precharged Antifreeze/Coolant is a virgin ethylene glycol based product blended with a high performance additive package. This low silicate formulation is phosphate and amine free and designed for use in all engine types. KLONDIKE's additive technology provides antifoam properties as well as rust and corrosion protection for all cooling system materials and ensures year-round protection against freeze-ups and boil-overs. KLONDIKE Diesel Precharged Antifreeze/ Coolant is fully formulated, containing a supplemental coolant additive with a minimum of 2400 ppm nitrite in concentrate form. This additive content ensures this product meets ASTM D6210 for heavy duty antifreeze/ coolant and will provide outstanding protection against wet sleeve liner pitting, cavitation, and corrosion. Formula also includes ingredients to disperse minor oil leakage, prevent fouling, and control hot surface scaling. Cooling systems filled and maintained exclusively with KLONDIKE Diesel Precharged Antifreeze/Coolant may exceed 480,000 km of on-road service or 6,000 hours/3 years of off-road service or stationary engine service when a formal antifreeze/coolant monitoring and maintenance program is followed. However, KLONDIKE Diesel Precharged Antifreeze/Coolant can last for the life of the engine, when SCA level is properly maintained.

Mixes readily with clean tap water.

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

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

- Fully formulated precharged with a high quality inhibitor package does not require an initial dose of supplemental coolant additives (SCA) on initial fill.
- **Service life** 480,000 km or 6,000 hours of premium protection.
- **Phosphate free** helps reduce the risk of hard water scale formation in the cooling system.
- All-metal protection Maximum water pump, wet sleeve liner, and fluid seal life.
- **Compatibility** fully compatible with liquid or filter based SCA's as well as other engine coolants.

SPECIFICATIONS AND APPROVALS

KLONDIKE All Engines 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

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

- **SAE** J1034/J1941
- CAT DEAC
- CID A-A-52624
- Chrysler MS 7170

- **Cummins** CES 14603
- Detroit Diesel 7SE298, 93K217
- Ford WSS-M97B18-A2
- Ford ESE-M97B44-A
- Freightliner 48-22880
- **GM** 1825M, 1899M
- **JOHN DEERE** H24A1/H24C1
- MACK SB232-014, 014 GS 17004
- NAV/INT B-1 (type II) (with molybdate added as per spec)

TYPICAL TECHNICAL PROPERTIES

PROPERTY	TEST METHOD	DIESEL PRECHARGED	
Specific gravity	ASTM D1122	1.110 - 1.125	
Nitrite	ASTM D 5827	2400 ppm, min	
Silicate	ASTM D3634	< 250 ppm	
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	10 min	
Water, mass %	ASTM D1123	2.8 max	
Foaming	ASTM D1881	150 mi vol., max.	
5 sec. break, max.		0.30/0.30	
Effect on non-metals		No adverse effect	
Effect on vehicle finish		No adverse effect	
Color		Fuchsia	

^{*}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 Precharged Antifreeze/coolant is an advanced, fully formulated 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.

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

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