



GENEX™ Global Universal Extended Life

Antifreeze & Coolant for passenger cars, light trucks, SUV, and Vans.

GENEX™ Premixed, 50/50 antifreeze/coolant is a universal/global, hybrid organic acid technology (HOAT), extended life, low-silicate, non-phosphate product suitable for automotive/light duty and heavy duty diesel applications.

UNIVERSAL

Since this is a HOAT extended life antifreeze/coolant it combines organic acid salts with conventional inorganic salts and azoles; which makes it compatible with all types of both extended life and conventional technology antifreeze/coolants.

CORROSION PREVENTION

This coolant is precharged, meaning that it contains a minimum of 1200 ppm nitrites. Its additives effectively control wet sleeve cylinder liner pitting/corrosion in heavy-duty diesel engines.

EXTENDED LIFE

The primary corrosion inhibition system consists of a combination of salts of carboxylic and phosphono-carboxylic acids. These inhibitors deplete very slowly relative to conventional inorganic salt compounds, providing the extended service life of this antifreeze. It utilizes a low-silicate level (less than 250 ppm as silicon) and is free of phosphates and amines. In addition the coolant contains an advanced additive inhibitor system to provide broader range protection than most coolants; a full range inhibitors protect all cooling system metals and year round protection against freeze-ups, boil-overs and corrosion under extreme conditions.

SAFE ON FINISHES AND RUBBER PARTS

It includes ingredients to disperse minor oil leakage, prevent fouling and control hot surface scaling and will not damage auto finishes or rubber parts.

VERSATILE

Because GENEX is formulated with low phosphate and silicate levels, it meets the requirements of European and Japanese OEM.

In automobiles, light trucks, SUV's, vans and other light duty applications, this product will provide a service life in excess of 5 years or 150,000 miles. In heavy-duty diesel applications (in which a formal monitoring and maintenance program is in place) it can provide a service life of 600,000 miles with the addition of our heavy-duty supplemental coolant additive at 300,000 miles.

GENEX extended - life coolant & antifreeze meets the following industry specifications:

- ASTM D3306 (automotive/light-duty)
- ASTM D4985 (heavy-duty diesel/low silicate)
- ASTM D6210/11 (fully formulated and precharged)
- TMC of ATA RP329/338*

*The Maintenance Council of the American Trucking Assoc.

- Antifreeze also meets the non-phosphate requirements of European OEM's and non-silicate requirements of Japanese OEM's

PHYSICAL PROPERTIES

Antifreeze Glycols	mass %	48.0 min.
Corrosion Inhibitors	mass %	1.1 min.
Water	mass %	49.0 max
Flash Point	°F	None
Weight per gallon at 60° F-16° C	lbs.	8.9 min.
Silicates	mass %	< 250 ppm

% ANTIFREEZE	FREEZING POINT		BOILING POINT	
	°F	°C	°F	°C
40%	-12 max.	-24 max.	260 min.	126 min.
50%	-34 max.	-36 max.	226 min.	107 min.
70%	-90 max.	-67 max.	270 min.	135 min.

**Boiling point shown using conventional 15 psi radiator cap.*

CHARACTERISTIC	SPECIFICATION	COMPANY	ASTM METHOD
Chloride	33ppm, max.		D3634
Specific gravity, 60/60°F	1.065 min.		D1122
Nitrite	1200 ppm min.		D5827
Boiling Point, 50% V/V	226°F/107°C		D1120
Freezing Point, 50% V/V	-34°F/-37°C min.		D1170
Effect on engine or vehicle	No effect		—
Ash content, mass %	2.5 max.		D1119
pH, 50% V/V	7.5-11.0		D1287
Reserve alkalinity*	None specified	3 min.	D1121
Water mass %	None specified	49.0 max.	D1123
Color	Distinctive	Gold, or as needed	—
Effect on nonmetals	No adverse effect		—
Storage stability	None specified	270 min.	—
Foaming	150 mi vol., max. 5 sec. break, max.		D1881

*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 with high-quality antifreeze. Present, state-of-the-art antifreeze formulations contain many new inhibitors which give added protection to certain metals but do not raise the RA numbers.

The purchaser hereby waives all guarantees and warranties and all other liabilities, expressed or implied, arising by law or liabilities therefore, expressed or implied, arising by law or otherwise, including without limitation, all obligations and liabilities with respect to loss of use, revenue or profit, or indirect to consequential damages, and any implied warranty of fitness for a particular purpose or of merchantability, or that any information, data or products can be used without infringing patents of third parties. Purchaser agrees to indemnify and hold harmless GlyEco, Inc. its subsidiaries and affiliates, from any liability.

Used antifreeze coolant in most states is not hazardous unless it contains more than 5 ppm of lead. We recommend that spent coolant never be disposed of by dumping into a storm sewer or onto the ground. Instead, contact your local municipality for instructions on where to and how to properly dispose of this coolant and protect our environment.