



LUBRICANTS

Guardol OAT HD Coolant/Antifreeze

Phillips 66® Guardol OAT HD Coolant/Antifreeze is an Organic Acid Technology (OAT) that is intended for use and compatible with any OAT extended life heavy duty coolant/antifreeze in any diesel commercial vehicle engine or stationary engine with aluminum and other various engine metals. The advanced formulation is based on a concentrated blend of long-lasting inhibitors designed to provide up to 600,000 miles/12,000 hours* of protection against temperature extremes, corrosion, scale, rust and premature water pump failure. Guardol OAT HD Coolant/Antifreeze is available in both concentrate and prediluted 50/50 formulas.

*TOP OFF: Will maintain extended life protection when added to any OAT extended life antifreeze/coolant. FLUSH AND FILL: Receive protection for up to 600,000 miles or 12,000 hours with a complete flush and fill using Guardol OAT HD Coolant/Antifreeze.

Applications

Check engine coolant level frequently and top off with Guardol OAT HD Coolant/Antifreeze when necessary. Guardol OAT HD Coolant/Antifreeze can also be used for flush and fill. To ensure best performance, the system should be drained and flushed thoroughly. A 50/50 mix of Guardol OAT HD Coolant/Antifreeze is recommended to ensure proper freezing/boilover protection. To provide the proper concentration level of inhibitors, never exceed 70%. Always check the specific maintenance and change-out intervals, coolant/antifreeze to water ratio, cooling system capacity, and service instructions recommended for your vehicle.

Meets or exceeds the following performance requirements:

- ASTM D3306, D4985, D6210, D7583
- TMC RP329, RP338
- Cummins Bulletin 3666132
- Cummins CES 14603
- Navistar
- Detroit Diesel 93K217
- Freightliner 48-25878
- CAT EC-1
- Volvo 128603
- SAE J1941

Features/Benefits

- Nitrite free, Organic Acid Technology (OAT)
- Compatible with all heavy duty OAT formulations
- Requires no initial Supplemental Coolant Additive (SCA) or Extender
- Complete liner pitting and corrosion protection for aluminum and all other engine metals
- When used as directed, Guardol OAT HD Coolant/Antifreeze provides long-lasting inhibition and corrosion protection

**Heavy Duty
Nitrite Free
OAT Extended
Life Coolant/
Antifreeze**

KEEPING THE
WORLD
RUNNING
SMOOTHLY. 



| Guardol OAT HD Coolant/Antifreeze | | |
|--|--------------------------------|--------------------------------|
| Composition | Typical Values | |
| Ethylene Glycol and Inhibitors: Concentrate 50 vol % | 97.9% | 51% |
| Water: Concentrate 50 vol % | 2.1% | 49% |
| Dyes | Trace | |
| Color | Yellow | |
| Odor | Characteristic | |
| Average Fluid Weight/Unit at 68°F (20°C): Concentrate 50 vol % | 9.3 lb (4.2 kg) / gal (3.78 L) | 8.9 lb (4.0 kg) / gal (3.78 L) |
| Properties | Typical Values | ASTM Method |
| Ash, Mass: Concentrate 50 vol % | 1.20% 0.60% | D1119 |
| pH, 50 vol % | 8.6 | D1287 |
| Reserve Alkalinity: Concentrate 50 vol % | 10.0 mL 5.0 mL | D1121 |
| Specific Gravity at 20°C: Concentrate 50 vol % | 1.118 1.070 | D1122 |
| Flash Point, 50 vol % | None | Tag Open Cup |
| Foam Test | 70 mL / 2.0 sec | D1881 |

| Protection | Freeze-Up Protection | Boil-Over Protection* |
|------------------|----------------------|-----------------------|
| 40% 60% Water | -12°F (-24°C) | 221°F (105°C) |
| 50% 50% Water | -34°F (-37°C) | 265°F (129°C) |
| 60% 40% Water | -62°F (-52°C) | 270°F (132°C) |
| 70% 30% Water | -84°F (-64°C) | 276°F (136°C) |

*Using a 15lb pressure cap in good condition.

Health & Safety Information

For recommendations on safe handling and use of this product, please refer to the Safety Data Sheet via <http://www.phillips66.com/EN/products/Pages/MSDS.aspx>.

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Typical properties are average values only and do not constitute a specification. Minor variations that do not affect product performance are to be expected during normal manufacture, and at different blending locations. Product formulations are subject to change without notification.

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