Heavy-Duty Conventional

Ethylene Glycol Heavy-Duty
Fully Formulated Antifreeze/Coolant

Heavy-Duty Conventional antifreeze/coolant is fully formulated and pre-charged for use in heavy-duty diesel engines. It is formulated with a heavy-duty additive package that contains the initial charge of supplemental coolant additive (SCA) and a minimum of 1200 ppm Nitrite (as NO_2). It provides excellent protection from cavitation erosion/corrosion in water pumps and wet sleeve cylinder liners, as well as excellent overall corrosion protection for multi-metal systems.

In systems where coolant filtration is in place along with a formal monitoring and maintenance program, the coolant can provide up to 3 years/300,000 miles with the addition of heavy-duty supplemental coolant additive (SCA) as needed. Monitoring and maintenance of the engine coolant should include regular testing at normal oil drain intervals.

Characteristic	Specification	Company Typical	ASTM Method
Color	Distinctive	Purple	Visual
Freezing Point (50% V/V)	-34ºF/-36ºC min.	-34ºF	D1177
Boiling Point (50% V/V)	226ºF/107ºC min.	230ºF	D1120
Specific gravity (60ºF)	1.065 min	1.070	D1122
pH (50% V/V)	10.2-10.8	10.7	D1287
Reserve alkalinity (50% V/V)	None specified	5.0 min.	D1121
Chloride (ppm)	25 Max.	< 5	D3634
Ash content, mass %	2.5 max.	< 2.5	D1119
Foaming Tendency	150 mL max. 5 seconds max.	Pass	D1881
Effect on engine/vehicle finish	No effect	Pass	D1882

Boiling point shown above and below is at atmospheric pressure. Add 40□F for 15 psi radiator cap.
Reserve alkalinity (RA) is a value agreed between the customer and supplier.

% Antifreeze	Freezing Point		Boiling Point*	
	ºF	ºC	ºF	ºC
40%	-9 max	-22 max	220 min	104 min
50%	-34 max	-36 max	226 min	107 min
60%	-54 max	-65 max	230 min	110 min

Check the vehicle manufacturer's recommendations or the owner's manual when servicing the cooling system, including coolant selection, top off, and maintenance.

Benefits

- **Available in concentrate and premix 50/50**
- **All season formulation cools engine in summer, protects from freezing in winter**
- **Works in all heavy-duty diesel and compressed natural gas engine cooling systems requiring conventionally inhibited HD coolants**
- **Phosphate-free formula reduces the risk of hot surface scaling.**
- **Meets the performance requirements of:**
  - **ASTM D6210**
  - **ASTM D3306**
    Which include:
    - **ASTM D1384**
    - **ASTM D4340**
    - **ASTM D2570**
    - **ASTM D2809**
- **Low silicate formulation meeting ASTM D4985**
- **Recommended for use in the following applications but not limited to:**
  - **TMC RP329**
  - **Cummins CES14603**
  - **Caterpillar EC-1**
  - **Freightliner 48-22880**
  - **Detroit Diesel 7SE298 and 93K217**
  - **Volvo/Mack**
  - **PACCAR**
  - **John Deere**