



# HDELN Nitrite-Free EG Antifreeze/Coolant Concentrate

## Technical Data Sheet

### Performance Fluids Benefits

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.

Does NOT contain 2EH (2-ethylhexanoic acid).

Meets the performance requirements of:

- TMC ATA RP 329
- TMC ATA RP 338A
- 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:

John Deere, PACCAR, Volvo/Mack, Caterpillar, Cummins CES14603, Detroit Diesel 93K217, MAN 324 Type SNF, MTU 5048, Mercedes DBL 7700, Navistar CEMS B-1 Type IIIA, and Hino Trucks

### Features

HDELN Nitrite-Free EG Antifreeze/Coolant Concentrate is an organic acid technology (OAT) antifreeze/coolant for heavy-duty diesel applications. It contains a proprietary inhibitor technology that is free of nitrite, phosphate, silicate and borate. The product provides year-round protection against freeze-ups, boil-overs and engine cooling system corrosion without the use of supplemental coolant additives (SCA's).

HDELN- Nitrite-Free EG Antifreeze/Coolant offers excellent heat transfer capabilities and high temperature protection for systems that contain aluminum alloys. Recommended for use in all HD applications, including systems that have controlled atmosphere brazed (CAB) radiators. In addition, this formulation provides excellent protection against wet sleeve liner pitting.

In heavy-duty applications provides up to 600,000 miles on-highway or up to 12,000 hours off-road service where a well-established monitoring program is in place for testing coolant at least twice a year. Coolant extender is generally needed at half-life (300,000 miles or 6,000 hours) and may be added based on results from coolant sample analysis.

### Product Specifications

PARAMETER	LIMIT
Appearance	clear yellow liquid*
Ethylene glycol (WT%)	91.0 min
pH (50% v/v)	8.0 – 9.0
Reserve alkalinity (ml)	8.0 min

\*Standard color. Custom color available upon request.

### Typical Properties\*

PROPERTY	VALUE
Corrosion inhibitors (WT%)	8.0 min
Water (WT%)	2.3
Boiling point (°F, 50% v/v, 15psi)	265 min**
Freezing point (°F, 50% v/v, 15psi)	-34
Specific gravity (60/60°F)	1.110 – 1.145
Density (PPG, 60°F)	9.3 min
Flash point (°F)	250
Chloride (ppm)	25 max
Ash content (WT%)	2.5 max
Silicates (WT%)	nil
Foam	150 ml max; 5 s break max
Effect on engine or vehicle finish	no effect
Effect on nonmetals	no adverse effect

\*These values should not be construed as sales specifications.

\*\*Boiling point shown using conventional 15 psig radiator cap.

Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user's specific application. Berryman Chemical Inc. does not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written, express or implied, or allegedly arising from any usage of any trade or from any course of dealing in connection with the use of the information contained herein or the product itself. The user expressly assumes all risk and liability, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. Further, information contained herein is given without reference to any intellectual property issues, as well as federal, state or local laws which may be encountered in the use thereof. Such questions should be investigated by the user.