



PRODUCT DATA

DefendAL™ Global HD Extended Life Coolant/Antifreeze

DefendAL™ Global HD Extended Life Coolant/Antifreeze is high performance global antifreeze that meets the latest and most stringent requirements of global Original Equipment Manufacturers. It contains a proprietary hybrid (HOAT) inhibitor system that is significantly more durable than conventional additive systems. It is recommended for top off of any color antifreeze system, conventional or organic acid. In automobiles, **DefendAL™ Global HD Extended Life Coolant/Antifreeze** will provide a service life in excess of 5 years or 150,000 miles, it has aluminum protecting silicate levels and contains no phosphates or amines. **DefendAL™ Global HD Extended Life Coolant/Antifreeze** also provides a higher reserve alkalinity level than most extended life antifreezes. It is a balanced combination of organic and inorganic additives, a true hybrid, and is compatible with both organic acid extended life coolants and conventional inorganic coolants. In addition, this Extended Life Antifreeze is compatible when mixed with other carboxylate-based coolants such as Dex-Cool®, Zerex or ChevronTexaco Extended Life nor with conventional coolants such as Prestone, Zerex and Peak. It is ideal for use in initial fills, coolant change-outs or top-offs.

DefendAL™ Global HD Extended Life Coolant/Antifreeze is formulated for, and is compatible with all American, Asian, and European automobile manufacturers. **DefendAL™ Global HD Extended Life Coolant/Antifreeze** meets ASTM D 3306 (automotive antifreeze) and ASTM D 4985 (low silicate heavy-duty antifreeze). It also meets ASTM D 6210 (fully formulated, precharged antifreeze). With proper maintenance **DefendAL™ Global HD Extended Life Coolant/Antifreeze** will provide a service life of 300,000 miles with an extender at 150,000 miles. It also meets or exceeds the following industry specifications as a concentrate or pre-diluted antifreeze/coolant.

Performance Levels: **

- ANFOR R 15-601
- ASTM D3306, D4985, D6210
- BS 6580 (British Standard)
- Caterpillar EC-1, DEAC
- Chrysler MS 7170 and MS 9769
- Cummins CES 14603
(as found in Service Bulletin 3666132-04)
- Daimler-Chrysler Automotive
- Detroit Diesel
- Federal Specification A-A-870A (Superseded by A-A-52624A Type I Concentration A)
- TMC of ATA RP329, RP338
- Mack
- Ford ESE-M97B44-A, WSS-M97B44-D, WSS-M97B51-A1
- GM 1825M/1899M/6277M (Dexcool® Compatible)
- FW HEFT R443 (Germany)
- JASO M325 (Japan)
- JIS K 2234 (Japan)
- John Deere H-5, H24B1, H24C1
- Mercedes Benz DBL 7700
- MTU
- Navistar B1, Type III
- SAE J1034, J814, J1941
- Volvo

* - Meets performance requirements but may or may not meet certain chemical requirements listed

Physical Properties:	Concentrate	50/50
Color	Yellow	Yellow
Weight per gallon @ 60° F (15.6° C), lbs.	9.44	9.08
Freezing point,		-34°F/-36°C
Boiling Point,		226°F/107°C
pH,		9.1
Reserve Alkalinity	7.5	3.1
Product Code:	9038	9042

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