

# DefendAL<sup>®</sup>

**NEW Formula!**  
**Better Performance!**



## Heavy Duty Nitrite Free Extended Life Antifreeze/Coolant

DefendAL<sup>®</sup> Heavy Duty Nitrite-Free Extended Life Antifreeze/Coolant is a premium Organic Acid Technology (OAT) formula. This virgin ethylene glycol-based fluid is specially formulated with advanced additive technology, and provides extended service maintenance protection in heavy duty applications without the addition of SCAs. It also meets the nitrite-free coolant requirements of many industry-leading OEMs.

- No addition of SCAs required
- Provides up to 1,000,000 miles or 20,000 hours of protection\*
- Great for mixed fleets - safe for use in heavy duty and light duty engines.
- Meets or exceeds ASTM D6210. Ideal for CAT EC-1, Cummins, Detroit Diesel, Navistar, or mixed fleets. Additional specifications on the back
- Cost of ownership 68% LESS than heavy duty conventional antifreeze/coolant\*\*

\*With proper maintenance. Consult your vehicle's owner's manual for recommendations. \*\*Based on typical fluid prices and labor costs and recommended maintenance practices. Recommended test interval is 300,000 miles/6,000 hours/1 year. Proper inhibitor levels can typically be achieved by topping off with DefendAL HD NF. Consult your vehicle's owner's manual for recommendations.

**DefendAL<sup>®</sup> For Heavy Duty Nitrite Free Extended Life Antifreeze/Coolant is your cooling system's best defense.**

- New formula provides approximately 50% better cavitation performance!
- Free of phosphates, silicates, nitrites, amines, and borates
- Offers improved wet sleeve liner cavitation protection
- Extended life corrosion protection for aluminum and all other cooling system metals
- High quality defoamer system, non-harmful to hoses, plastics or gaskets
- Compatible with most major brands of Organic Acid Technology coolants

### Available in:

#### Concentrate

Bulk #12855  
Totes #11490  
Drums #11489  
Cases #11519

#### 50/50 Premix

Bulk #12857  
Totes #11492  
Drums #11491  
Cases #11520

#### 40/60 Premix

Bulk #12983



a Recochem Company

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Technical Information	Concentrate	50/50
Fluid Color	Red	Red
Density @ 68°F, lb/gal	9.3	8.9
pH (50v% solution)	8.3	8.3
Maintenance Interval, miles (hours)*	300,000 (6,000)	300,000 (6,000)
Coolant Lifetime, miles (hours)	1,000,000 (20,000)	1,000,000 (20,000)

\*Can typically be maintained through routine top off. Recommended coolant check every 300,000 miles.

FREEZE/BOIL PROTECTION CHART	% Cooling System Capacity	PROTECTION FROM	
		Freezing Down To	Boiling Up To <sup>1</sup>
	40	-13° F	+260° F
	50	-34° F	+265° F
<sup>1</sup> Using a 15 psi pressure cap		60	-62° F
			+270° F

Shipping Information	Cases	Steel Drums	Totes
Package Quantity	3 x 1 Gallons	55 Gallons	275 Gallons
Package Dimensions	12.75" x 7.8" x 12"	23.5" x 34.5"	40" x 48" x 46"
Gross Container Weight - Concentrate	≈30 Pounds	≈550 Pounds	≈2705 Pounds
Gross Container Weight - 50/50	≈29 Pounds	≈528 Pounds	≈2595 Pounds
Gross Weight on Pallet - Concentrate	≈2210 Pounds	≈2264 Pounds	N/A
Gross Weight on Pallet - 50/50	≈2122 Pounds	≈2174 Pounds	N/A
Quantity Per Pallet	72	4	1
Pallet Dimensions	40" x 48" x 54.5"	48" x 48" x 39.4"	40" x 48" x 46"
Product Part Number - Concentrate	11519	11489	11490
Product Part Number - 50/50	11520	11491	11492
UPC Code - Concentrate	652138102967	652138102974	652138102998
UPC Code - 50/50	652138103247	652138103001	652138103025
UPC Case Code - Concentrate	652138102981	N/A	N/A
UPC Case Code - 50/50	652138103018	N/A	N/A
Weight Per Gallon - Concentrate	≈9.5 Pounds	≈9.5 Pounds	≈9.5 Pounds
Weight Per Gallon - 50/50	≈9 Pounds	≈9 Pounds	≈9 Pounds

**⚠ WARNING: REPRODUCTIVE HARM - WWW.P65WARNINGS.CA.GOV.**

## DefendAL<sup>®</sup> Heavy Duty Nitrite Free Extended Life Recommended for use in:

ASTM D3306  
ASTM D6210  
BS 6580:2010  
CAT EC-1  
CES 14439  
CES 14636  
CNH MAT 3620 Grade EG3/EG4

CNH MAT 3624  
Cummins CES 14603  
Daimler DBL 7700.30  
Detroit Diesel 93K217  
Detroit Diesel 7SE298  
Deutz H 0685-7: Class DQC CB-14  
GE Jenbacher 1000-201

John Deere JDM H24C  
John Deere JDS-G135  
Komatsu KES 07 892  
MAN 324 Type SNF  
MAXXFORCE  
MB BB00.40-P-0310-01A, 325.3/326.3  
MTU MTL 5048

MWM Deutz TR0199-99-1115  
MWM Deutz TR0199-99-2091  
Navistar CEMS B-1 Type IIIA  
Navistar MPAPS B-1 Type IIIA  
Volvo Coolant VCS: 20774185

Always consult your vehicle's owner's manual for proper fluid removal and flushing procedures.



KOST USA recommends to always properly dispose of spent coolant. Contact your state or local municipality for instructions on proper disposal to protect our environment. If a coolant spill occurs, call local authorities and ask for proper instruction on how to clean up the spill.



KOST® USA is the Largest Family-Founded Manufacturer, Supplier, and Marketer of Antifreeze, Glycols, and Functional Fluids in the United States. Founded in 1985 and Headquartered in Cincinnati, OH. We Proudly Build our Customer's Private Label Brands and our Oil & Gas brands through High-Performance Products and Superior Service. Our business is primarily in the Automotive & Heavy-Duty Aftermarket.

1-800-661-9391 | kostusa.com

