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For use in ALL MAKES, ALL MODELS of avy Duty Diesel Engines foreign & domestic. 20.000 miles or 20,000 hours protection

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EXTENDED LIFE

EZE/COOLANT

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### 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 approved 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

#### Available in:

Totes #11490

Drums #11489

Cases #11519

**Concentrate** Bulk #N/A

#### 50/50 Premix

Bulk #N/A Totes #11492 Drums #11491 Cases #11520

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

- Extended service life of 1,000,000 miles, 8 years or 20,000 hours of off road use.
- Free of phosphates, silicates, nitrites, amines, and borates
- · Offers excellent wet sleeve liner cavitation protection
- Contains better heat transfer properties than conventional coolants requiring SCAs
- Extended life corrosion protection for aluminum and all other engine metals
- High quality defoamer system, non-harmful to hoses, plastics or gaskets
- Compatible with most major American brands of Organic Acid Technology coolants

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> Heavy Duty Nitrite Free Extended Life Antifreeze/Coolant

Technical Information	Concentrate	50/50	
Fluid Color	Red	Red	
Density @ 68°F, lb/gal	9.5	9.0	
pH (50v% solution)	8.6	8.6	
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	% Cooling System Capacity	PROTECTION FROM Freezing Down To Boiling Up To <sup>‡</sup>	
PROTECTION	40	-13° F	+260° F
CHART	50	-34° F	+265° F
<sup>‡</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"	45.3" x 40" x 48"
Gross Container Weight - Concentrate	≈30 Pounds	≈557 Pounds	≈2739 Pounds
Gross Container Weight - 50/50	≈29 Pounds	≈533 Pounds	≈2621 Pounds
Gross Weight on Pallet - Concentrate	≈2237 Pounds	≈2290 Pounds	N/A
Gross Weight on Pallet - 50/50	≈2144 Pounds	≈2196 Pounds	N/A
Quantity Per Pallet	72	4	1
Pallet Dimensions	40" x 48" x 54.5"	45" x 45" 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. **Heavy Duty Nitrite Free Extended Life**

#### **Specifications:**

ASTM D3306 ASTM D6210 BS 6580:2010 CAT EC-1 CID-A-52624A CNH MAT 3620 Grade EG3/EG4 GE Jenbacher 1000-201 **CNH MAT 3624** 

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

Cummins CES 14603 Daimler DBL 7700.30 Detroit Diesel 93K217 Detroit Diesel 7SE298 Deutz H 0685-7: Class DQC CB-14

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

MWM Deutz TR0199-99-1115 MWM Deutz TR0199-99-2091 Navistar MPAPS B-1 Type IIIA TMC RP 338A Volvo Coolant VCS: 20774185 Waukesha 4-2429H



KOST USA, Inc. 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.



