



TURBO POWER™



COOLANT TECHNOLOGY FOR HD DIESEL ENGINES



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HD OAT M&N – POWERED BY RECO-COOL™

HD OAT M&N Heavy Duty Diesel Extended Life Antifreeze/Coolant is based on a proprietary organic acid corrosion inhibitor package powered by RECO-COOL™ technology (OAT) with nitrite and molybdate. It protects coolant system metals against rust and corrosion and provides excellent high temperature aluminum and wet sleeve liner cavitation protection.

Performance Features & Benefits:

- OAT base – 2-EHA Free (2 ethylhexanoic acid)
- Engineered for NEW cooling systems
- Powered by RECO-COOL™ Corrosion Inhibitor Technology
- Performance rated at up to 8 years, 15,000 hours, 750,000 miles
- Silicate, Borate, and Phosphate free
- CAT EC-1 Compatible
- Excellent high temperature aluminum protection
- Excellent heat transfer capabilities
- Excellent liner cavitation performance
- Compatible with, but **DOES NOT** require addition of SCA or coolant extenders
- Hard water compatible
- Elastomer compatible
- Compatible with similarly formulated HDD ELC's
- Extended shelf life stability (8 years); no silicate drop-out or gel formation

APPLICATIONS: Designed for use in heavy duty diesel applications where extended service interval and aluminum compatibility is required. It is recommended for use in on-road truck, off-road, farm and marine engine applications including, but not limited to, Caterpillar, Cummins, Detroit Diesel/MTU, GM Heavy Truck, Freightliner, PACCAR and Volvo Mack.

COMPATIBILITY: This lobrid antifreeze/coolant contains organic acid technology (OAT) with a small amount of inorganic additives (IAT) and is compatible with other OAT coolants with no adverse effects. While deleterious effects are not expected to be significant, mixing with conventional coolants will result in a lower than expected lifetime.

Ethylene Glycol-based Engine Coolant

Typical Product Properties:

Characteristic	Performance	Test Method
pH (50% by vol.) ^a	7.8 – 8.5	ASTM D1287
Specific gravity (60°F/15.6°C) ^b	1.125 - 1.135	ASTM D1122
Freeze point (50% by vol.)	-34°F/-37°C	ASTM D1177
Foam volume (mL)	150 max.	ASTM D1881
Foam break time (second)	5 max.	ASTM D1881
Chloride (ppm)	25 max.	ASTM D3634
Color	Red	
Glycol Content (wgt.%)	94 min.	
Inhibitors and Water Content (wgt.%)	6.0 max.	

^a 50% volume aqueous solution

^b Measured at 60°F/15.6°C

Formulated to meet and is recommended for use with the following industry and OEM coolant specifications:

ASTM D3306, D4985, D6210, D7583, AS/NZS 2108.1:1997 "Type A", BS 6580, BS5117, Caterpillar EC-1 (Section 2.3-4.5), Cummins 3666132, & 14603, Detroit Diesel 7SE 298 & 93K217, Freightliner 48-22880, GM 1825M, 1899M and Heavy Truck, Navistar / ITE CEMS B-1 Type III, JIS K2234, Kenworth R026-170-97, MACK 014GS17004, MAN 324, MTU MTL 5048, PACCAR CS0185, Peterbilt 8502.002, TMC RP 329B, TMC RP 338, Volvo and CID-A-A-52624



Item #	Formulation	Container Size	Case Pack	UPC	SCC
86-524	Concentrate	1 Gal.	4	0-56438-86524-7	400-56438-86524-5
86-534	50-50 Pre-diluted	1 Gal.	4	0-56438-86534-6	400-56438-86534-4
26-529	Concentrate	55 Gal.	NA	NA	NA
26-539	50-50 Pre-diluted	55 Gal.	NA	NA	NA
26-529-1000	Concentrate	264 Gal.	NA	NA	NA
26-539-1000	50-50 Pre-diluted	264 Gal.	NA	NA	NA

HD OAT NF – POWERED BY RECO-COOL™

HD OAT NF Extended Life Antifreeze/Coolant is based on a nitrite-free proprietary organic acid corrosion inhibitor package powered by RECO-COOL™ technology (OAT). It protects the latest coolant system materials against corrosion and deterioration and provides excellent high temperature aluminum and wet sleeve liner cavitation protection.

Performance Features & Benefits:

- Performance rated at up to 8 years, 20,000 hours, 1,000,000 miles
- Engineered for NEW cooling systems
- Powered by RECO-COOL™ Corrosion Inhibitor Technology
- Compatible with, but **DOES NOT** require addition of SCA or coolant extenders
- CAT EC-1 Compatible
- Excellent high temperature corrosion performance
- 2-EHA Free (2 ethylhexanoic acid)
- Excellent heat transfer capabilities
- Excellent liner cavitation performance
- Amine, Borate, Nitrite and Silicate free
- Hard water compatible



APPLICATIONS: Designed for intense heavy duty diesel applications where high heat and aluminum protection is required. It is recommended for use in all on-road and off-road vehicles including, but not limited to, Caterpillar, Cummins, Detroit Diesel/MTU, GM Heavy Truck, Freightliner, PACCAR/DAF and Volvo Mack.

COMPATIBILITY: While deleterious effects are not expected to be significant, mixing with conventional coolants will result in a lower than expected lifetime.

Ethylene Glycol-based Engine Coolant

Typical Product Properties:

Characteristic	Performance	Test Method
pH (50% by vol.) ^a	7.8 – 9.0	ASTM D1287
Specific gravity (60°F/15.6°C) ^b	1.125 - 1.135	ASTM D1122
Freeze point (50% by vol.)	-34°F/-37°C	ASTM D1177
Foam volume (mL)	150 max.	ASTM D1881
Foam break time (second)	5 max.	ASTM D1881
Chloride (ppm)	25 max.	ASTM D3634
Color	Gold	
Glycol Content (wgt.%)	94 min.	
Inhibitors and Water Content (wgt.%)	6.0 max.	

^a 50% volume aqueous solution

^b Measured at 60°F/15.6°C

Formulated to meet and is recommended for use with the following industry and OEM coolant specifications:

ASTM D3306, D4985, D6210, D7583, AS/NZS 2108.1:1997 "Type A", BS 6580, BS5117, Caterpillar EC-1, Cummins 3666132, & 14603, Detroit Diesel 7SE 298, 93K217, Freightliner 48-22880, GM 1825M, 1899M and Heavy Truck, Navistar / ITE CEMS B-1 Type III-A, JIS K2234, Kenworth R026-170-97, MACK 014GS17004 & 014GS17009, MAN 324, MTU MTL 5048, PACCAR CS0185, Peterbilt 8502.002, TMC RP 329B, TMC RP 338, Volvo and CID-A-A-52624

Item #	Formulation	Container Size	Case Pack	UPC	SCC
86-924	Concentrate	1 Gal.	4	0-56438-86924-5	400-56438-86924-3
86-914	50-50 Pre-diluted	1 Gal.	4	0-56438-86914-6	400-56438-86914-4
26-929	Concentrate	55 Gal.	NA	NA	NA
26-919	50-50 Pre-diluted	55 Gal.	NA	NA	NA
26-929-1000	Concentrate	264 Gal.	NA	NA	NA
26-919-1000	50-50 Pre-diluted	264 Gal.	NA	NA	NA

HD MIXED FLEET ELC – FOR ALL VEHICLES

HD MIXED FLEET ELC Antifreeze/Coolant is based on a proprietary organic acid corrosion inhibitor package powered by RECO-COOL™ technology (OAT) that provides protection against wet sleeve liner cavitation and is compatible with the flux found in controlled atmosphere brazed (CAB) radiators.

Performance Features & Benefits:

- Complete Mixed Fleet use; heavy duty diesel, light truck and automotive
- **Powered by RECO-COOL™** Corrosion Inhibitor Technology
- Low silicate formula; Borate, Nitrite, Amine and Phosphate free
- Performance rated at 6 years, 12,000 hours or 600,000 miles
- Add as top-up to any color antifreeze
- Protects against rust, corrosion and pitting for all coolant system metals, including aluminum
- Enhanced water pump performance
- Provides exceptional boil-over and freeze protection when used in accordance with OEM and product manufacturer's guidelines regarding product dilution
- Provides protection on a flush & fill with no coolant extender required



APPLICATIONS: Specifically designed for complete MIXED FLEET use, it is also recommended for use in all makes and models of foreign and domestic passenger vehicles, light duty and heavy duty diesel applications.

COMPATIBILITY: Fully compatible with IAT, HOAT and OAT coolant technologies. While deleterious effects are not expected to be significant, mixing with conventional coolants will result in a lower than expected lifetime.

Ethylene Glycol-based Engine Coolant

Typical Product Properties:

Characteristic	Performance	Test Method
pH (50% by vol.) ^a	7.6 - 9.0	ASTM D1287
Specific gravity (60°F/15.6°C) ^b	1.120 - 1.140	ASTM D1122
Freeze point (50% by vol.)	-34°F/-37°C	ASTM D1177
Foam volume (mL)	150 max.	ASTM D1881
Foam break time (second)	5 max.	ASTM D1881
Chloride (ppm)	25 max.	ASTM D3634
Silicon, from silicate (ppm)	250 max.	ASTM D6130
Color	Pale Yellow	
Glycol Content (wt. %)	93 min.	
Inhibitors and Water Content (wt. %)	7 max.	
Boron (ppm)	< 10	
Phosphorous (ppm)	< 10	

^a 50% volume aqueous solution

^b Measured at 60°F/15.6°C

In addition to normal product development testing, this product has been evaluated for chemical and performance compatibility with a wide range of different engine coolant technologies (including Asian, European and North American) using ASTM D1384, D2809 and D4340.

Meets the performance requirements of:

ASTM D3306, D4985, D6210, D7583, AS.NZ 2108.1:1997 Type A, JIS K2234, GM 1825M & 1899M, BS 6580, BRP (Bombardier Recreational Products), Kubota, Kobelco, DDC 93K217

Recommended for use in:

Caterpillar, Chrysler MS7170 & MS9769, Cummins 14603, Ford ESE-M97B44A, WSS-M97B44D, WSS-M97B51-A1, Freightliner 48-22880, GM 6277M, GM Heavy Truck, Navistar/ITE CEMS B-1, Kenworth, MACK, PACCAR / DAF and VW TL 774G

Item #	Formulation	Container Size	Case Pack	UPC	SCC
86-324	50-50 Pre-diluted	1 GaL.	4	0-56438-86324-3	400-56438-86324-1
86-319	Concentrate	55 Gal.	NA	NA	NA
86-329	50-50 Pre-diluted	55 Gal.	NA	NA	NA
86-319-1000	Concentrate	264 Gal.	NA	NA	NA
86-329-1000	50-50 Pre-diluted	264 Gal.	NA	NA	NA

HD DIESEL ELC – EXTENDED LIFE

HD Diesel Extended Life Antifreeze/Coolant is a hybrid technology product that is OEM approved and specially formulated to protect all coolant system metals and provide excellent wet sleeve liner cavitation protection.

Performance Features & Benefits:

- Low silicate; Phosphate and Amine free
- Provides an in-service life of up to 600,000 miles, 12,000 hours or 6 years, or whichever comes first, when used in combination with HD Diesel ELC Coolant Extender
- Does not require an initial charge of supplemental coolant additives (SCA)
- Designed for use in light and heavy duty diesel applications where an extended service interval is required
- Provides exceptional boil-over and freeze protection
- Available in Concentrate and 50/50 Pre-diluted formulations



APPLICATIONS: Recommended for use in on-road truck, off-road, farm, marine and stationary applications including, but not limited to, Caterpillar, Cummins, Detroit Diesel/MTU, GM Heavy Truck, Freightliner, PACCAR and Volvo Mack.

COMPATIBILITY: Specially formulated to protect heavy duty diesel wet sleeve liners, it is compatible with coolant filters, heavy duty diesel SCAs, hard water and other low silicate extended life engine coolants. While deleterious effects are not expected to be significant, mixing with conventional coolants will result in a lower than expected lifetime.

Ethylene Glycol-based Engine Coolant

Typical Product Properties:

Characteristic	Performance	Test Method
pH (50% by vol.) ^a	7.5 - 8.6	ASTM D1287
Specific gravity (60°F/15.6°C) ^b	1.125 - 1.140	ASTM D1122
Freeze point (50% by vol.)	-34°F/-37°C	ASTM D1177
Foam volume (mL)	150 max.	ASTM D1881
Foam break time (second)	5 max.	ASTM D1881
Reserve Alkalinity (mL)	6.0 min.	ASTM D1121
Chloride (ppm)	25 max.	ASTM D3634
Silicon (ppm)	250 max.	ASTM D6130
Color	Red	
Glycol Content (wgt.%)	94 min.	
Inhibitors and Water Content (wgt.%)	6.0 max.	

^a 50% volume aqueous solution

^b Measured at 60°F/15.6°C

Formulated to meet and is recommended for use with the following industry and OEM coolant specifications:

ASTM D3306, D6210, D7583
 CAT EC-1
 CID-A-A-52624
 Detroit Diesel 7SE298
 Japanese Standard JIS K2234
 MTU MTL 5048
 TMC RP 329
 Cummins
 PACCAR CS0185

Item #	Formulation	Container Size	Case Pack	UPC	SCC
86-734	Concentrate	1 Gal.	4	0-56438-86734-0	400-56438-86734-8
86-834	50-50 Pre-diluted	1 Gal.	4	0-56438-86834-7	400-56438-86834-5
86-739	Concentrate	55 Gal.	NA	NA	NA
86-839	50-50 Pre-diluted	55 Gal.	NA	NA	NA
86-738-1000	Concentrate	264 Gal.	NA	NA	NA
86-838-1000	50-50 Pre-diluted	264 Gal.	NA	NA	NA

HD DIESEL – HEAVY DUTY

HD DIESEL Antifreeze/Coolant is a superior fully formulated traditional engine coolant based on a proprietary formulation of corrosion inhibitors to protect against cavitation and corrosion of all common coolant system metals.

Performance Features & Benefits:

- Low silicate; Phosphate free
- Aluminum compatible (safe for use in aluminum engines)
- Does not require an initial charge of supplemental coolant additives (SCA) upon initial fill
- Advanced liner pitting and corrosion protection
- Recommended for use where a heavy duty diesel coolant is required; including, but not limited to Caterpillar, Cummins, Detroit Diesel, Ford, GM and Volvo Mack
- Provides exceptional boil-over and freeze protection
- Available in Concentrate and 50/50 Pre-diluted formulations



APPLICATIONS: Recommended for multi-vehicle fleets including automotive, light duty and heavy duty diesel applications such as on-road trucks, off-road and farm applications.

COMPATIBILITY: Specially formulated to protect heavy duty diesel wet sleeve liners, it is compatible with coolant filters, heavy duty diesel SCAs, hard water and other traditional fully formulated corrosion inhibited engine coolants.

Ethylene Glycol-based Engine Coolant

Typical Product Properties:

Characteristic	Performance	Test Method
pH (50% by vol.) ^a	10 - 11	ASTM D1287
Specific gravity (60°F/15.6°C) ^b	1.110 - 1.140	ASTM D1122
Freeze point (50% by vol.)	-34°F/-37°C	ASTM D1177
Foam volume (mL)	150 max.	ASTM D1881
Foam break time (second)	5 max.	ASTM D1881
Reserve Alkalinity (mL)	10.0 min.	ASTM D1121
Chloride (ppm)	25 max.	ASTM D3634
Silicon (ppm)	250 max.	ASTM D6130
Color	Purple	
Glycol Content (wgt.%)	95 min.	
Inhibitors and Water Content (wgt.%)	5 max.	

^a 50% volume aqueous solution

^b Measured at 60°F/15.6°C

Formulated to meet and is recommended for use with the following industry and OEM coolant specifications:

ASTM D3306, D4985, D6210
 Detroit Diesel 7SE298, 93K217
 GM 1825M, 1899M
 TMC RP 329B

Item #	Formulation	Container Size	Case Pack	UPC	SCC
86-284	Concentrate	1 Gal.	4	0-56438-86284-0	400-56438-86284-8
86-474	50-50 Pre-diluted	1 Gal.	4	0-56438-86474-5	400-56438-86474-3
86-289	Concentrate	55 Gal.	NA	NA	NA
86-479	50-50 Pre-diluted	55 Gal.	NA	NA	NA
86-289-1000	Concentrate	264 Gal.	NA	NA	NA
86-479-1000	50-50 Pre-diluted	264 Gal.	NA	NA	NA

HD Diesel Engines

Coolant Selection Guide

Properties



				
Product Name	Turbo Power			
Application	HD Mixed Fleet ELC	HD OAT NF	HD OAT M&N ¹	HD Diesel ELC ¹
	Complete mixed fleet use; all makes, all models of foreign and domestic automotive, light truck and heavy duty diesel.	Heavy duty diesel applications where high heat and aluminum protection is required. Recommended for use in all on-road and off-road vehicles including but not limited to, Caterpillar, Cummins, Detroit Diesel/MTU, GM Heavy Truck, Freightliner, PACCAR/DAF and Volvo Mack.	Heavy duty diesel applications where an extended service interval and aluminum compatibility is required. Recommended for use in on-road truck, off-road, farm and marine engine applications including but not limited to, Caterpillar, Cummins, Detroit Diesel/MTU, GM Heavy Truck, Freightliner, PACCAR and Volvo Mack.	Light and heavy duty diesel applications where an extended service interval is required. Recommended for use in on-road truck, off-road, farm, marine and stationary applications including, but not limited to, Caterpillar, Cummins, Detroit Diesel/MTU, GM Heavy Truck, Freightliner, PACCAR and Volvo Mack.
Aluminum compatibility	Yes	Yes	Yes	Yes
Base fluid	Ethylene glycol	Ethylene glycol	Ethylene glycol	Ethylene glycol
Product pH	7.6 - 9.0	7.8 - 9.0	7.8 - 8.5	7.5 - 8.6
Product color	Pale Yellow	Gold	Red	Red
OEM Specification/ Performance level	ASTM D3306, D4985, D6210, D7583 • AS/NZ 2108.1:1997 Type A • JIS K2234 • GM 1825M & 1899M • BS 6580, BRP (Bombardier Recreational Products) • Kubota • Kobelco • DDC 93K217 Recommended for use in: Caterpillar • Chrysler MS7170 & MS9769 • Cummins 14603 • Ford ESE-M97B44A, WSS-M97B44D, WSS-M97B51-A1 • Freightliner 48-22880 • GM 6277M, GM Heavy Truck • Navistar/ITE CEMS B-1 • Kenworth • MACK • PACCAR / DAF • VW TL 774G	ASTM D3306, D4985, D6210, D7583 • JIS K2234 • AS/NZS 2108.1:1997 "Type A" • BS 6580, BS5117 • Caterpillar EC-1 • Cummins 3666132 & 14603 • CID-A-52624 • Detroit Diesel 7SE 298, 93K217 • Freightliner 48-22880 • GM 1825M, 1899M and Heavy Truck • Navistar / ITE CEMS B-1 Type III • CEMS B-1 Type III-A • Kenworth R026-170-97 • MACK 014G517004 & 014G517009 • MAN 324 • MTU MTL 5048 • PACCAR CS0185 • Peterbilt 8502.002 • TMC RP 3298 • Volvo 8502.002 • TMC RP 3298 • TMC RP 338 • Volvo	ASTM D3306, D4985, D6210, D7583 • AS/NZS 2108.1:1997 "Type A" • BS 6580, BS5117 • Caterpillar EC-1 • Cummins 3666132 & 14603 • Detroit Diesel 7SE 298, 93K217 • Freightliner 48-22880 • GM 1825M, 1899M and Heavy Truck • Navistar / ITE CEMS B-1 Type III • JIS K2234 • Kenworth R026-170-97 • MACK 014G517004 • MAN 324 • MTU MTL 5048 PACCAR CS0185 • Peterbilt 8502.002 • TMC RP 3298 • TMC RP 338 • Volvo • CID-A-52624	ASTM D3306 ASTM D4985 ASTM D6210 GM 1825M, 1899M TMC RP 3298 Detroit Diesel 7SE298, 93K217
CONCENTRATE	86-319, 86-319-1000	86-924, 26-929, 26-929-1000	86-524, 26-529, 26-529-1000	86-284, 86-289, 86-289-1000
50/50 PRE-DILUTED	86-324, 86-329, 86-329-1000	86-914, 26-919, 26-919-1000	86-534, 26-539, 26-539-1000	86-474, 86-479, 86-479-1000
Recommended change interval	Up to 6 years, 12,000 hours or 600,000 miles	Up to 8 years, 20,000 hours or 1,000,000 miles	Up to 8 years, 15,000 hours or 750,000 miles	Up to 6 years, 12,000 hours or 600,000 miles
SCA or coolant extender			Coolant extender compatible.	SCA extender compatible, use only as required by OEM.
				SCA compatible, monitor and add SCA only as required as per OEM instructions.



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Product size availability: 1 Gal., 55 Gal. and 264 Gal.
Information above includes recommendations for aftermarket coolants. Refer to owner's manual for suggested manufacturer's coolants and warranty issues.
1. A propylene glycol-based version of this product is available, based on demand.

HD Diesel Engines

Coolant Cross Reference Chart



RECO-COOL™ Corrosion Inhibitor Technology

Competitive Coolant Brand	Antifreeze Color	Turbo Power HD Mixed Fleet ELC	Turbo Power HD OAT NF	Turbo Power HD OAT M&N	Turbo Power HD Diesel ELC	Turbo Power HD Diesel
CAT DEAC/NGEC	Magenta (Pink)	Yes	No	No	Yes	Yes
CAT ELC	Red	Yes	Yes	Yes	Yes	No
Cummins Fleet Cool ES	Blue	Yes	No	No	Yes	Yes
Cummins ES Compleat	Blue	Yes	No	No	Yes	Yes
Cummins ES Compleat OAT	Red	Yes	Yes	Yes	No	No
Chevron Havoline Conventional	Green	Yes	No	No	Yes	Yes
Chevron Delo ELC	Red	Yes	Yes	Yes	Yes	No
Chevron Delo ELC - Nitrite Free	Gold	Yes	Yes	No	No	No
DDC Power Cool Diesel	Purple	Yes	No	No	Yes	Yes
DDC Power Cool Plus	Red	Yes	Yes	No	No	No
Peak Fleet Charge	Pink	Yes	No	No	Yes	Yes
Peak Final Charge NOAT	Red	Yes	Yes	Yes	Yes	No
Peak Final Charge Global	Red Gold	Yes	Yes	Yes	No	No
Prestone Command HD Extended Service	Purple	Yes	No	No	Yes	Yes
Prestone Command HD ELC	Red	Yes	Yes	Yes	No	No
Prestone Command HD - Nitrite Free	Gold	Yes	Yes	No	No	No
Volvo VCS	Yellow	Yes	Yes	Yes	No	No

Nitrite Solutions

Nitrite Free Solutions



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The information above includes recommendations for aftermarket coolants. Refer to owner's manual for suggested manufacturer's coolants and warranty issues.