

A FAMILY BRAND OF



# ANTIFREEZE / COOLANT PRODUCT CATALOG



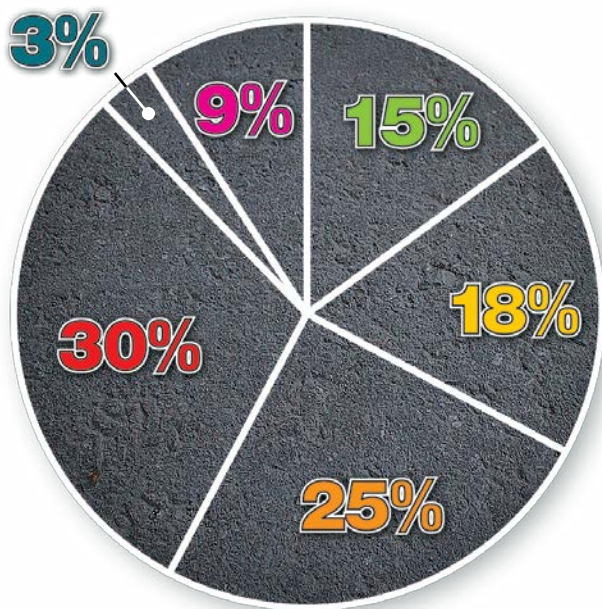
THE TEMPERATURE NEVER DROPS BELOW ZEREX™

# COOLANT CHEMISTRY MATTERS

For more than 70 years, ZEREX™ has been protecting many of the world's finest vehicles with quality antifreeze. ZEREX is the technology leader with approved chemistries by GM, Chrysler, Ford, Mercedes-Benz and others. In addition, ZEREX's patented formulas are recommended for most other leading light-duty and heavy-duty Original Equipment Manufacturers (OEMs) in the market today.

Light and heavy-duty engines are more complex than ever. OEMs use custom, lightweight metal alloys and gasket materials in engine designs to meet performance standards. Vehicle manufacturers require specific chemistries of coolant be used in conjunction with their engine designs for optimal performance. ZEREX's patented formulas are designed to meet or exceed the changing demands of modern performance and engineering specifications in the harshest conditions.

With more than 258 million registered cars and trucks<sup>1</sup> on the road, ZEREX provides consumers with the right chemistry required for their vehicle as specified by manufacturers. For light duty trucks and cars, distinct chemistries are needed to meet the majority of OEM specifications.



## COOLANT CHEMISTRIES ON THE ROAD

- IAT CHEMISTRY
- HOAT CHEMISTRY
- OAT CHEMISTRY
- P-HOAT CHEMISTRY
- NAP FREE HOAT CHEMISTRY
- SI-OAT CHEMISTRY

*Percentage represents the number of registered vehicles by OEM specified coolant chemistry type.*



### ***It's more important than you think!***

Automaker approved chemistry means the coolant:

- Is the same as specified by the automaker
- Has been thoroughly tested to provide the same superior protection as the original factory fluid



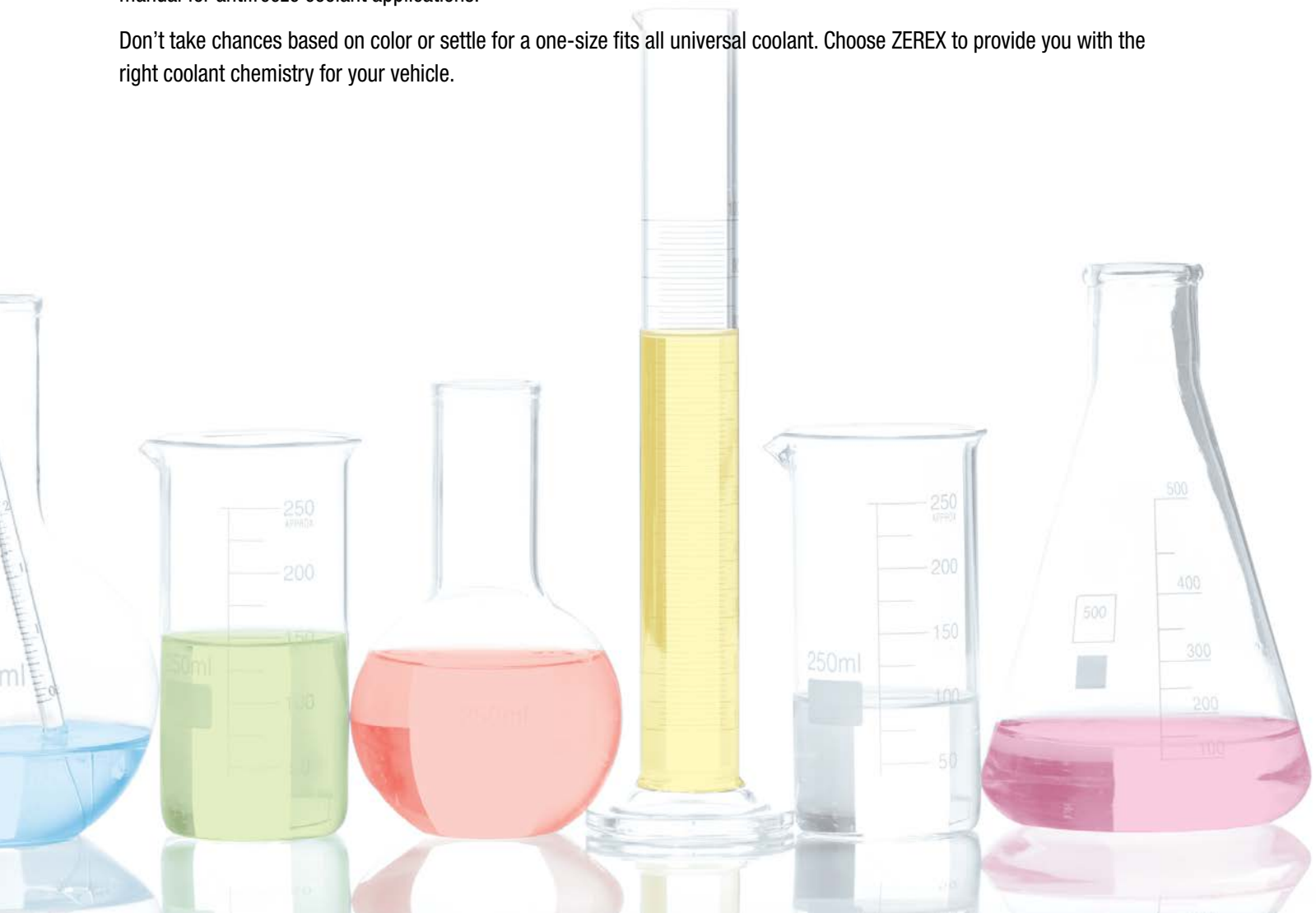
## COOLANT CHEMISTRY AND COLOR

TYPE	INHIBITOR TECHNOLOGY	ZEREX COOLANT	VEHICLES	COLOR
IAT (Inorganic Additive Technology)	Silicates	ZEREX Original	Older vehicles	Green
OAT (Organic Acid Technology)	Organic Acids	ZEREX DEX-COOL®	GM, Saab, VW	Orange
HOAT (Hybrid OAT)	Silicates & Organic Acids	ZEREX G-05®	Ford, Chrysler, European	Yellow
HOAT (Hybrid OAT, Phosphate-Free)	NAP Free	ZEREX G-48®	BMW, Volvo, Tesla, Mini, others	Teal
P-HOAT (Phosphated HOAT)	Phosphates & Organic Acids	ZEREX Asian Vehicle	Toyota, Nissan, Honda, Hyundai, KIA, & other Asian vehicles	Red/Blue
Si-OAT (Silicated HOAT)	Silicates & Organic Acids	ZEREX G-40®	Mercedes-Benz, Audi, VW, Porsche, others	Purple

Antifreeze coolant colors have changed as advanced chemistry was needed for compatibility with new, lighter metals used in engine design. Traditional iron block engines used coolant dyed green. The dye was added to help identify leaks.

Today, OEMs select the color of the factory-fill fluid for identification purposes. Color has no bearing on performance and is not a good indicator of the chemistry. When selecting the proper fluid for your vehicle, always follow the specifications in the owner's manual for antifreeze coolant applications.

Don't take chances based on color or settle for a one-size fits all universal coolant. Choose ZEREX to provide you with the right coolant chemistry for your vehicle.



# ANTIFREEZE COOLANT APPLICATION CHART

FOR PASSENGER VEHICLES AND LIGHT-DUTY TRUCKS

		1996 & Older	1997 - 2001	2002	2003	2004 - 2011	2012 - 2013	2014	2015 & Newer
American	GM	● ZEREX Original Green	● ZEREX Dex-Cool®						
	Chrysler	● ZEREX Original Green		● ZEREX G-05®				● ZEREX Dex-Cool®	
	Ford Trucks & SUVs	● ZEREX Original Green			● ZEREX G-05®			● ZEREX Dex-Cool®	
	Ford Passenger Cars	● ZEREX Original Green				● ZEREX G-05®	● ZEREX Dex-Cool®		
European	Mercedes-Benz	● ZEREX G-05®					● ZEREX G-48®	● ZEREX G-40®	
	BMW, Smart, Volvo, Mini Cooper	ZEREX G-05®					● ZEREX G-48®		
	Audi, Jaguar, Porsche, Volkswagen, Land Rover	ZEREX G-05®	● ZEREX Dex-Cool®					● ZEREX G-40®	
Asian	Toyota, Lexus, Scion and others requiring a red P-Hoat	ZEREX G-05®	ZEREX Asian Vehicle						
	Honda, Acura, Mazda, Hyundai, Kia, and others requiring a blue P-Hoat	ZEREX G-05®	ZEREX Asian Vehicle						

● Automaker approved for use in these applications



# ZEREX™ PASSENGER CAR COOLANTS



Available in concentrate or convenient, ready to use formulas

## ZEREX DEX-COOL®

- 5 Year / 150,000 Mile Guarantee
- OAT DEX-COOL® APPROVED for use in GM vehicles produced since 1996, SAAB vehicles since 2001, Ford cars produced since 2012, Ford, Fiat and Chrysler vehicles since 2013 (see Owner's Manual for specific model years)
- Meets and / or exceeds the following industry and engine specifications:  
GM 6277M, ASTM D3306, SAE J1034, J814 and J1941, TMC of ATA RP-302B, and Federal Specification A-A-870A

ZXEL1	ZEREX Dex-Cool	6/1 Gallon
ZXEL2	ZEREX Dex-Cool	55 Gallon Drum
ZXELRU1	ZEREX Dex-Cool Ready To Use	6/1 Gallon
ZXELRU2	ZEREX Dex-Cool Ready To Use	55 Gallon Drum

DEX-COOL® is a registered trademark of General Motors Corporation, used under license - DC-4



Available in concentrate or convenient, ready to use formulas

## ZEREX G-05®

- 5 Year / 150,000 Mile Guarantee in Light-Duty Applications
- HOAT chemistry APPROVED for use in Mercedes-Benz and certain Ford & Chrysler vehicles (see Owner's Manual for specific model years)
- Phosphate-free for use in European vehicles such as Volvo, BMW, Smart & Mini Cooper
- Meets and / or exceeds the following industry and engine specifications:  
Chrysler MS9769, Ford WSS-M97B51-A1, ASTM D3306, ASTM D6210, GM 1825M, GM 1899M, MTU MTL 5048, John Deere JDM H24, and MAN List 3.3.7

ZXG051	ZEREX G-05	6/1 Gallon
ZXG052	ZEREX G-05	55 Gallon Drum
688337	ZEREX G-05	275 Gallon Tote
ZXG05RU1	ZEREX G-05 Ready To Use	6/1 Gallon
ZXG05RU2	ZEREX G-05 Ready To Use	55 Gallon Drum
808136	ZEREX G-05 Ready To Use	275 Gallon Tote

# ZEREX™ PASSENGER CAR COOLANTS



Available in concentrate or convenient, ready to use formulas

## ZEREX G-40®

- 5 Year / 150,000 Mile Guarantee
- This Original Equipment Manufacturer (OEM) APPROVED formula ensures you are getting the precise factory-filled original formula
- Provides unsurpassed protection for vehicles requiring genuine G-40 and G-12++ fluid
- Nitrite-free, phosphate-free, European technology. Premium, long-life, Si-organic acid technology chemistry
- OEM Approved for Audi, Lamborghini TL 774 G, MAN 324 Type Si-OAT, Mercedes-Benz Specification 325.5, MTU MTL 5048, Porsche and Volkswagen TL 774 G, Cummins CES 14603, Detroit Diesel DFS93K217ELC
- Meets and / or exceeds the following industry and engine specifications:  
ASTM D3306, ASTM D4985, ASTM 6210, Federal Specification A-A-870A, SAE J1034, J814, J1941, Bentley, Bugatti, Mercedes-Benz Truck, Seat, Scania, and Škoda

861526	ZEREX G-40	6/1 Gallon
691732	ZEREX G-40	55 Gallon Drum
861399	ZEREX G-40 Ready To Use	6/1 Gallon



Available in concentrate or convenient, ready to use formulas

## ZEREX G-48®

- 5 Year / 150,000 Mile Guarantee
- This Original Equipment Manufacturer (OEM) APPROVED formula ensures you are getting the precise factory-filled original formula
- Provides unsurpassed protection for vehicles requiring genuine G-48 fluid
- Low-silicate, low pH, phosphate-free European technology
- Contains superior inhibitors to prevent harmful corrosion
- Provides unsurpassed protection of metals and elastomers
- OEM Approved for Audi – 1996 and older models, BMW, Deutz, Liebherr, Maybach, Mercedes-Benz Specification 325.0, Mini, MTU, Rolls-Royce, Saab, Tesla, Van Hool, Volvo 2015 and older models, and Volkswagen 1996 and older models
- Meets and / or exceeds meets or exceeds the following industry and engine specifications:  
ASTM D3306, ASTM D4985, Cummins 90T8-4, Detroit Diesel 7SE298, Federal Specification A-A-870A, GM 1825M, GM 1899M, Jenbacher TA-NR1000-0201, MAN324 NF, Saab 690 1599 Approved, SAE J1034, J814, J1941, TMC of ATA RP-302B, and VW TL 774 C

861583	ZEREX G-48	6/1 Gallon
ZXG482	ZEREX G-48	55 Gallon Drum
859537	ZEREX G-48 Ready To Use	6/1 Gallon
874078	ZEREX G-48 Ready To Use	55 Gallon Drum



## ZEREX ASIAN VEHICLE

- 5 Year / 150,000 Mile Guarantee
- Silicate-free, long-life, Phosphated Hybrid Organic Acid Technology (p-HOAT) chemistry
- Recommended for Toyota/Lexus, Honda/Acura, Nissan/Infiniti, KIA, Hyundai, and other Asian make vehicles that call for a “red” antifreeze coolant
- Meets the following specifications:

Hyundai/Kia MS 591-08, Mitsubishi ES-64217, JIS K 2234-1994, and Ford WSS-M97B55-A, ASTM D3306, ASTM D4985, and Federal Specification A-A-870A

675130	ZEREX Asian Vehicle Ready To Use	6/1 Gallon
675129	ZEREX Asian Vehicle Ready To Use	55 Gallon Drum
865407	ZEREX Asian Vehicle	55 Gallon Drum



## ZEREX ASIAN VEHICLE

- 5 Year / 150,000 Mile Guarantee
- Silicate-free, long-life, Phosphated Hybrid Organic Acid Technology (p-HOAT) chemistry
- Recommended for Honda/Acura, Nissan/Infiniti, KIA, Hyundai, and other Asian make vehicles requiring a blue or green fluid
- Meets the following specifications:

Hyundai/Kia MS 591-08, Mitsubishi ES-64217, JIS K 2234-1994, and Ford WSS-M97B55-A, ASTM D3306, ASTM D4985, and Federal Specification A-A-870A

861398	ZEREX Asian Vehicle Blue Ready To Use	6/1 Gallon
865309	ZEREX Asian Vehicle Blue	55 Gallon Drum
874908	ZEREX Asian Vehicle Blue Ready To Use	55 Gallon Drum

# ZEREX™ PASSENGER CAR COOLANTS



Available in  
concentrate or  
convenient,  
ready to use  
formulas

## ZEREX ORIGINAL GREEN

- 5 Year / 150,000 Mile Guarantee in Light-Duty Applications
- Traditional green chemistry found in most early model year vehicles
- Low-silicate formula is ideal for heavy duty applications
- Protects all cooling system metals while providing excellent high-temperature aluminum protection
- Meets and / or exceeds the following industry and engine specifications:

GM1825M, GM 1899M, Ford ESE-M97B44-A, Chrysler MS 7170, ASTM D3306 & D4985, SAE J1034, J814C & J1941, TMC of ATA RP-302B, Federal Specifications A-A-870A, Detroit Diesel 7SE298, Cummins 90T8-4

ZX001	ZEREX Original Green	6/1 Gallon
ZX002	ZEREX Original Green	55 Gallon Drum
734250	ZEREX Original Green	275 Gallon Tote
ZXRU1	ZEREX Original Green Ready To Use	6/1 Gallon
ZXRU2	ZEREX Original Green Ready To Use	55 Gallon Drum
808135	ZEREX Original Green Ready To Use	275 Gallon Tote
ZXRU4	ZEREX Original Green Ready To Use	6/64 oz.





# ZEREX™ HEAVY-DUTY COOLANTS

## ZEREX has the OEM Approved chemistry required for Heavy-Duty Applications

Modern heavy-duty engines demand more effective technology to deliver improved heat transfer, freeze and boiling protection and corrosion protection. From traditional, precharged chemistry to the latest in nitrite-free technology, ZEREX has the right fluid for all on-road and off-road heavy-duty engines today. ZEREX is the leader in coolant technology and has more OE approvals than other leading brands.

Valvoline™ works closely with OEMs to understand the requirements of today's diesel engine. Heavy-duty engines are expected to last longer, contain wet sleeve cylinder liners, and run at higher temperatures and pressure than passenger cars. These harsher operational conditions make the diesel engine more susceptible to liner pitting and hard water scale and deposits. In order to provide adequate protection, heavy-duty coolants require special additives and formulations to fully protect the cooling system.

ZEREX has a complete product line of extended life coolants (ELC) and fully formulated engine coolants, designed to protect against overheating, corrosion, liner pitting, hard water scale and deposits to keep heavy-duty equipment running longer.



Available in concentrate or convenient, ready to use formulas

### ZEREX G-05®

- 3 Year / 300,000 Miles / 7,000 Hour Guarantee in Heavy-Duty Applications
- HOAT chemistry APPROVED for use in Ford, Chrysler, and Mercedes-Benz vehicles (see owners manual for specific model years)
- Fully formulated to help prevent liner pitting in heavy-duty diesel engines
- HOAT chemistry approved by John Deere® and MAN® engines
- Meets and / or exceeds the following industry and engine specifications:

Chrysler MS9769, Ford WSS-M97B51-A1, ASTM D3306, ASTM D6210, CAT EC-1, Cummins 14603 Approved, Detroit Diesel 7SE298 Approved, Navistar, Paccar, Mack, GM Wind Turbines Approved, GM 1825M, GM 1899M, MTU MTL 5048, John Deere JDM H24, and MAN List 3.3.7

ZXG051	ZEREX G-05 HD	6/1 Gallon
ZXG052	ZEREX G-05 HD	55 Gallon Drum
688337	ZEREX G-05 HD	275 Gallon Tote
ZXG05RU1	ZEREX G-05 HD Ready To Use	6/1 Gallon
ZXG05RU2	ZEREX G-05 HD Ready To Use	55 Gallon Drum
808136	ZEREX G-05 HD Ready To Use	275 Gallon Tote

# HD

# ZEREX™ HEAVY-DUTY COOLANTS



Available in concentrate or convenient, ready to use formulas

## ZEREX G-40®

- 3 Year / 300,000 Mile Guarantee in Heavy-Duty Applications
- Original Equipment Manufacturer (OEM) APPROVED formula ensures you are getting the precise factory-filled original formula and provides unsurpassed protection for vehicles requiring genuine G-40 and G-12++ fluid
- Nitrite-free, phosphate-free, European technology. Premium, long-life, Si-organic acid technology chemistry
- OEM APPROVED Cummins CES 14603, Detroit Diesel DFS93K217ELC, MAN 324 Type Si-OAT, Mercedes-Benz Specification 325.5, MTU MTL 5048, and Scania
- Meets and / or exceeds the following industry and engine specifications: ASTM D3306, ASTM D4985, ASTM 6210, Federal Specification A-A-870A, SAE J1034, J814, J1941, and Mercedes-Benz Truck

861526	ZEREX G-40	6/1 Gallon
691732	ZEREX G-40	55 Gallon Drum
796335	ZEREX G-40	275 Gallon Tote
861399	ZEREX G-40 Ready To Use	6/1 Gallon
861744	ZEREX G-40 Ready To Use	275 Gallon Tote



Available in concentrate or convenient, ready to use formulas

## ZEREX G-48®

- 3 Year / 300,000 Mile / 7000 Hour Guarantee in Heavy-Duty Applications
- Original Equipment Manufacturer (OEM) APPROVED formula ensures you are getting the precise factory-filled original formula and provides unsurpassed protection for vehicles requiring genuine G-48 fluid
- Low-silicate, low pH, phosphate-free European technology
- Contains less than 250 parts per million of silicon as required by the heavy-duty trucking industry
- Superior inhibitors to prevent harmful corrosion
- Provides unsurpassed protection of metals and elastomers
- OEM Approved for Heavy-Duty use in BMW, Deutz, Liebherr, Mercedes-Benz Specification 325.0, MTU, and Van Hool
- Meets and / or exceeds the following industry and engine specifications: ASTM D3306, ASTM D4985, Cummins 90T8-4, Detroit Diesel 7SE298, Federal Specification A-A-870A, GM 1825M, GM 1899M, Jenbacher TA-NR1000-0201, MAN324 NF, Saab 690 1599 Approved, SAE J1034, J814, J1941, TMC of ATA RP-302B, and VW TL 774 C, and Volvo

861583	ZEREX G-48	6/1 Gallon
ZXG482	ZEREX G-48	55 Gallon Drum
811877	ZEREX G-48	275 Gallon Tote
859537	ZEREX G-48 Ready To Use	6/1 Gallon
874078	ZEREX G-48 Ready To Use	55 Gallon Drum
801972	ZEREX G-48 Ready To Use	275 Gallon Tote



Available in concentrate or convenient, ready to use formulas

## ZEREX NITRITE FREE EXTENDED LIFE

- Next generation technology provides 6 years / 600,000 miles or 12,000 hours of service life with no addition of supplemental coolant additives (SCA's) needed or recommended
- For use in all heavy-duty engines requiring a Nitrite-Free Extended Life Coolant (ELC) product including those using ACERT or EGR technologies. Backwards compatible for OAT applications
- Silicate-free, amine-free, and borate-free formula protects cylinder liners and water pumps from cavitation erosion-corrosion. Lubricates water pumps
- Patent pending formula meets or exceeds the following industry and engine specifications:

Cummins 14603, CAT EC-1, Case New Holland, DAF MAT 74002, Detroit Diesel DFS93K217ELC, Freightliner 48-22880, John Deere, Mack, Man 324 SNF, MTU, Navistar CEMS B-1 Type IIIA, Mercedes-Benz DBL 7700, Paccar, Porsche/Audi, Scania, Siemens Wind Turbines, Volvo, ASTM D3306, ASTM 4985, ASTM D6210, SAE J814, J1034, J1941, JIS K 2234, Ford Europe WSS-M97B44-D, TMC RP 329, GM 6277M, Silicate-free requirement of Japanese OEM's, Nitrite-free requirements of European OEM's (including Volvo Construction Equipment), MTU and Mercedes-Benz, and Komatsu/Isuzu.

846439	ZEREX HD Nitrite Free Extended Life	6/1 Gallon
846440	ZEREX HD Nitrite Free Extended Life	55 Gallon Drum
870397	ZEREX HD Nitrite Free Extended Life	275 Gallon Tote
846437	ZEREX HD Nitrite Free Ext Life Ready To Use	6/1 Gallon
846438	ZEREX HD Nitrite Free Ext Life Ready To Use	55 Gallon Drum
870402	ZEREX HD Nitrite Free Ext Life Ready To Use	275 Gallon Tote



Available in concentrate or convenient, ready to use formulas

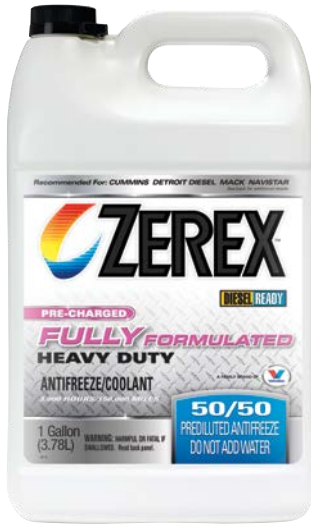
## ZEREX EXTENDED LIFE

- 3 Year / 300,000 Mile / 7,000 Hour Guarantee
- Extend protection to 6 years / 600,000 miles / 14,000 hours with ZEREX Extender
- Meets CAT EC-1, Cummins 14603, and long-life specifications
- OAT chemistry (Organic Acid Technology)
- Protects all cooling system metals while providing excellent high temperature aluminum protection
- Fully formulated or "Pre-Charged" to protect diesel engines from liner pitting and corrosion
- Meets and / or exceeds the following industry and engine specifications: Caterpillar EC-1, Cummins 14603 & 3666286, Detroit Diesel 7SE298, TMC of ATA RP-329B & 338, Federal Specification A-A-870A, ASTM D6210 & D3306, SAE J1034 & J814, GM 1899M & 1825M, Thermo King, Link Belt, Navistar, Mack, and Terex approved

ZXED1	ZEREX Extended Life	6/1 Gallon
ZXED2	ZEREX Extended Life	55 Gallon Drum
808139	ZEREX Extended Life	275 Gallon Tote
ZXEDRU1	ZEREX Extended Life Ready To Use	6/1 Gallon
ZXEDRU2	ZEREX Extended Life Ready To Use	55 Gallon Drum
688183	ZEREX Extended Life Ready To Use	275 Gallon Tote

# HD

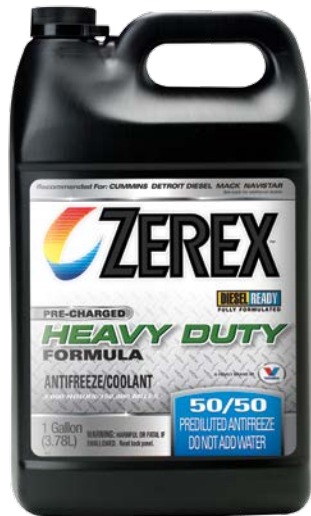
# ZEREX™ HEAVY-DUTY COOLANTS



## ZEREX FULLY FORMULATED

- 3 Year / 150,000 Mile / 3,000 Hour Guarantee
- IAT chemistry (Inorganic Acid Technology)
- Pre-charged to protect diesel engines from liner pitting and corrosion
- Patented formula meets or exceeds the following industry and engine specifications:  
ASTM D 6210, ASTM D 3306, Cummins 3666286, 90T8, Detroit Diesel 7SE298, GM 1825M, 1899M, SAE J814, J1941, J1034, TMC OF ATA RP-302B, TMC OF ATA RP-329B, Federal Specification A-A-870A and A-A-52624

813055	ZEREX Fully Formulated	55 Gallon Drum
812970	ZEREX Fully Formulated	275 Gallon Tote
841943	ZEREX Fully Formulated Ready To Use	6/1 Gallon
813053	ZEREX Fully Formulated Ready To Use	55 Gallon Drum
813054	ZEREX Fully Formulated Ready To Use	275 Gallon Tote



## ZEREX PRE-CHARGED

- 3 Year / 150,000 Mile / 3,000 Hour Guarantee
- IAT chemistry (Inorganic Acid Technology)
- Protects all cooling system metals while providing excellent high temperature aluminum protection
- Fully formulated or “Pre-Charged” to protect diesel engines from liner pitting and corrosion
- Meets and / or exceeds the following industry and engine specifications:  
Cummins 90T8-4 & 3666286, Detroit Diesel 7SE298, Kenworth R026170-97, TMC of ATA RP-329B, ASTM D3306, D6210, Federal Specifications A-A-52624 & A-A-870, SAE J1034 & J814, GM 1825M & 1899, Navistar, Mack, Clarke approved

ZXPC2	ZEREX HD Pre-Charged	55 Gallon Drum
ZXPCRU1	ZEREX HD Pre-Charged Ready To Use	6/1 Gallon
ZXPCRU2	ZEREX HD Pre-Charged Ready To Use	55 Gallon Drum
808138	ZEREX HD Pre-Charged Ready To Use	275 Gallon Tote

# ZEREX™ HEAVY-DUTY APPLICATION CHART

<p><b>ZEREX™ Pre-Charged</b></p> <p><i>3 Year 3,000 Hours 150,000 Miles</i></p> <ul style="list-style-type: none"> <li>• Ethylene glycol</li> <li>• Low-silicate</li> </ul>	<p><b>ZEREX™ Fully Formulated</b></p> <p><i>3 Year 3,000 Hours 150,000 Miles</i></p> <ul style="list-style-type: none"> <li>• Ethylene glycol</li> <li>• Low-silicate</li> </ul>	<p><b>ZEREX™ G-05®</b></p> <p><i>3 Year 7,000 Hours 300,000 Miles</i></p> <ul style="list-style-type: none"> <li>• Ethylene glycol</li> <li>• Phosphate-free</li> </ul>	<p><b>ZEREX™ Extended Life</b></p> <p><i>3 Year 7,000 Hours 300,000 Miles</i></p> <p><small>ACHIEVE 14,000 HOURS AND 600,000 MILES WITH ZEREX EXTENDER.</small></p> <ul style="list-style-type: none"> <li>• Ethylene glycol</li> <li>• Phosphate-free</li> </ul>	<p><b>ZEREX™ Nitrite Free</b></p> <p><i>6 Year 12,000 Hours 600,000 Miles</i></p> <ul style="list-style-type: none"> <li>• Ethylene glycol</li> <li>• Silicate-free</li> </ul>
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**MANUFACTURER SPECIFICATIONS** ZEREX meets or exceeds the following manufacturer specifications:

<b>Cummins</b>	SB 3666286	SB 3666286	CES 14603	CES 14603	CES 14603
<b>Caterpillar</b>	Diesel Engine	Diesel Engine	EC-1	EC-1	EC-1
<b>Detroit Diesel</b>	7SE298	7SE298	7SE298	7SE298	DFS93K217ELC
<b>Navistar</b>	CEMS B-1	CEMS B-1	CEMS B-1	CEMS B-1	CEMS B-1 Type IIIA

**OTHER APPLICATIONS** ZEREX meets or exceeds the specifications for use in the following equipment:

FREIGHTLINER	FREIGHTLINER	JOHN DEERE	CAT	FREIGHTLINER
MACK	KENWORTH	MERCEDES-BENZ	DETROIT DIESEL	KENWORTH
PACCAR	MACK	MTU	NAVISTAR	JOHN DEERE
	PACCAR		VOLVO	SCANIA
				VOLVO/MACK

**OTHER SPECIFICATIONS** ZEREX meets or exceeds the following industry specifications:

<b>ASTM</b>	D3306, D6210	D3306, D6210	D3306, D6210	D3306, D6210	D3306, D6210, D4985
<b>TMC RP</b>	302B, 329B	329B, 302A	329, 338	329, 338	329
<b>Federal Specification</b>	A-A-870A, A-A-52624	A-A-870A, A-A-52624	A-A-870A	A-A-870A	A-A-870A

## ZEREX™ Extender

Revitalize your corrosion and liner pitting protection with ZEREX Extender. Just pour in one bottle at the 300,000 mile, 7,000-hour or 3-year mark, and you can go up to 6 years, 14,000 hours or 600,000 miles without changing your antifreeze! For use only with ZEREX Extended Life Antifreeze/Coolant.



# ZEREX™ CROSS REFERENCE CHART

	COLOR	CHEMISTRY										GM	FORD	Chrysler	Toyota, Honda, KIA, Nissan, Hyundai, &	VW
		Conventional IAT Without SCA's	Organic Acid Technology (OAT)	Hybrid Organic Acid Technology (HOAT)	Phosphated Hybrid Organic Acid Technology (PHOAT)	Pre-Charged Fully Formulated (MFT)	Nitrite Organic Acid Technology Extended Life (NOAT-ELC)	Nitrite Free Organic Acid Technology Extended Life (NFOAT-ELC)	ZEREX Proprietary Formula	Propylene Glycol (PG) Technology						
ZEREX ORIGINAL GREEN	GREEN	●										1996 & OLDER	2002 & OLDER	2001 & OLDER		
ZEREX DEX-COOL®	ORANGE		●									1997-CURRENT * GM6277M	2012 (CARS) 2013 & NEWER WSS-M97B44-D	2013 & NEWER	✓	✓
ZEREX G-05®	GOLD			●								1899M, 1825M	2003-2012 (TRUCKS) 2004-2012 (CARS) WSS-M97B51-A1*	2002-2013		
ZEREX ASIAN VEHICLE	PINK/RED BLUE				●										HYUNDAI/KIA MS 591-08 MITSUBISHI ES-64217 JIS K 2234-1994	
ZEREX HEAVY DUTY PRE-CHARGED	GREEN				●							1899M, 1825M	✓	✓		
ZEREX HEAVY DUTY FULLY FORMULATED	PINK/RED				●							1899M, 1825M	✓	✓		
ZEREX HEAVY DUTY EXTENDED LIFE	RED					●						1899M, 1825M	✓	✓		
ZEREX NITRITE FREE ELC	YELLOW						●					GM 6277M, 1899M, 1835M	✓	✓	✓	✓
ZEREX G-20® FUEL CELL COOLANT	UNDYED							●				✓				
ZEREX G-30®	PURPLE		●									✓	✓	✓	✓	VW TL 774-D
ZEREX G-40®	PINK			●								✓	✓	✓		VW TL 774-J*
ZEREX G-48®	BLUE			●								1899M, 1825M	✓	✓		VW TL 774-C
ZEREX G-93®	GREEN			●												
ZEREX 2792® PG	BLUE								●			1899M, 1825M	✓	✓		

**ZEREX is Approved (\*) or Recommended/Meets (✓) in the following applications**

SEBU6251-13	90T8-4	7SE298		CEMS B-1 TYPE I									
EC-1	CES 14603 *	7SE298 *APPROVED	*APPROVED	✓	✓		*APPROVED	*APPROVED	✓				*APPROVED
✓	✓	7SE298	✓	✓	✓					R026- 170-97			
✓	✓	7SE298	✓	CEMS B-1 TYPE II	✓					R026- 170-97			
EC-1	CES 14603, 3666286	7SE298	✓	CEMS B-1 TYPE III	✓				✓				
EC-1	CES 14603	DFS93K217ELC	✓	CEMS B-1 TYPE IIIA	✓	✓	✓	✓	✓	✓	✓	✓	✓
							✓						
	90T8-4	DFS93K217ELC APPROVED	✓			MAN 324 SNF	✓	*APPROVED		✓	✓	*APPROVED	
	CES 14603	DFS93K217ELC APPROVED	✓			MAN 324 TYPE SI-OAT	MB 325.5	*APPROVED		✓			
	90T8-4	7SE298				MAN 324 NF	*APPROVED	*APPROVED				*APPROVED 2015 & OLDER YEAR MODELS	
								*APPROVED					
✓	✓	7SE298	✓	CEMS B-1 TYPE II	✓					R026- 170-97			

# ZEREX™ RADIATOR CHEMICALS

Did you know cooling system failures are a leading cause of engine breakdown? ZEREX Radiator Chemicals are a full line of technologically advanced chemicals formulated to clean, seal and protect your vehicle's cooling system against harmful deposits that can lead to engine failure.



## ZEREX Super Sealer

- Seals cooling system leaks
- Safe for use on all cooling system metals
- Non-clogging liquid formula
- Compatible with all antifreeze coolants
- Protects and seals EGR cooler leaks
- Compatible with all antifreeze coolants including heavy duty applications
- Approved by Cummins® for use in ISX/QSX 15 engines

PART NUMBER ZXC03



## ZEREX Super Cleaner

- Heavy-duty patented formula helps remove radiator solder bloom, rust, scale, and other deposits that flushes miss
- Reduces engine coolant and engine oil temperatures for cooling systems with initially plugged radiator tubes and passages
- Compatible with all antifreeze coolants including heavy-duty applications
- Safe for use on all cooling system materials

PART NUMBER ZXC02



## ZEREX Super Flush

- Quickly flushes accumulated sediment and corrosion
- Restores cooling system efficiency wby removing light rust, scale and oily residues

PART NUMBER ZXC01



## ZEREX Water Pump Lubricant Super Protector

- Compatible with all antifreeze coolants
- Provides added water pump protection
- Protects all cooling system metals
- Contains powerful rust and corrosion inhibitors

PART NUMBER ZXC04



## ZEREX Extender

- For use only with ZEREX HD Extended Life Coolant to revitalize corrosion and liner pitting protection
- Use at the 300,000 mile, 7,000-hour or 3-year mark, to extend fluid life to 6 years, 14,000 hours or 600,000 miles

PART NUMBER ZXEDX3



For more information, contact  
Valvoline Customer Service at 1-800-TEAM-VAL  
[www.valvoline.com](http://www.valvoline.com)