

# Fleetguard®



## Coolant Products

COOLANT



# REAL™ Solutions.

## Fleetguard Cooling System Maintenance Products

Estimates project that over 40% of total engine repair costs are related to problems that originate in the cooling system. Repairs are costly and create unnecessary downtime that affects equipment operations and customer deadlines. Fleetguard cooling system products provide unmatched protection with various maintenance programs to meet your needs and keep your engines running longer with less downtime.

### Unmatched Protection

In addition to providing superior freeze and boil over protection, Fleetguard products protect your engine from the most damaging cooling system problems, including:

- Scale
- Corrosion
- Liner pitting

Fleetguard coolants are manufactured to the highest standards and meet the performance specifications of all major OEMs. You can depend on Fleetguard cooling system products to provide unmatched protection to your engine.

### Easy Maintenance

Fleetguard cooling system maintenance is as simple as 1, 2, 3.

1. Fill with the lifetime coolant that meets your needs.
2. Maintain additive levels at regular service intervals with liquid additives or chemically charged filters.
3. Test with our simple dip and read test strips and maintain as needed.

### One Stop Shop

Our comprehensive line of cooling system products includes everything you need to ensure an easy, trouble-free cooling maintenance program:

- Fully Formulated Heavy Duty Antifreeze Coolants
- Heat Transfer Fluids
- Field and Laboratory Testing
- Extenders and Supplemental Coolant Additives (SCAs)
- Cooling System Cleaners
- Coolant Filters – Standard and Chemically Charged

All Fleetguard coolants are compatible with all other coolants available and are suitable for use in all gasoline, diesel, and natural gas engines.



### ES Compleat™ OAT

- Organic Lifetime Coolant with 300,000 mi (500,000 km) or 6000 Hours Service Intervals
- Easy Maintenance with OAT Extender or filter
- Superior Liner Pitting, Scale and Corrosion Protection
- OAT Extender Extends Coolant Life 300,000 mi (500,000 km) or 6000 Hours
- Meets ASTM 6210, TMC RP329 and Performance Specifications of all Major OEMs
- Available in Ethylene Glycol Formulation

	OAT EG Concentrate	*OAT EG PreMix	OAT Extender
Bulk	*CC2784	*CC2789	
275 Gal. Tote (1040 L)	CC2783	CC2788	
55 Gal. Drum (208 L)	CC2782	CC2787	
1 Gal. Bottle (3.78 L)	CC2780		
6/ 1 Gal. Bottle (3.78 L)		CC2785	
55 Gal. Drum (208 L)		CC2770 60/40	
275 Gal. Tote (1040 L)		CC2790 60/40	
6/ 1 Qt. Bottle (.94 L)			CC2779
12/ 1 Pint Bottle (.47 L)			CC2777



## ES Compleat

- Hybrid Lifetime Coolant with 150,000 mi (250,000 km) or 4000 Hours Service Intervals
- Easy Maintenance with ES Extender or Filter
- Best Liner Pitting, Scale and Corrosion Protection
- ES Extender Extends Coolant Life 150,000 mi (250,000 km) or 4000 Hours
- Meets ASTM 6210, TMC RP329 and Performance Specifications of all Major OEMs
- Available in Ethylene Glycol and Less Toxic Propylene Glycol Formulations

	EG Concentrate	*EG PreMix	PG Concentrate	*PG PreMix	ES Extender
Bulk	*CC2822	*CC2827	*CC2832	*CC2837	
Bulk		*CC2862 60/40			
275 Gal. Tote (1040 L)	CC2823	CC2834	CC2833	CC2838	
275 Gal. Tote (1040 L)				CC2872 60/40	
55 Gal. Drum (208 L)	CC2821	CC2826	CC2831	CC2836	
55 Gal. Drum (208 L)		CC2863 60/40		CC2865 60/40	
5 Gal. Pail (19 L)	CC2847	CC2848	CC2849	CC2850	
6/ 1 Gal. Bottle (3.78 L)	CC2820	CC2825	CC2830	CC2835	
6/ 1 Qt. Bottle (.94 L)					CC2840
12/ 1 Pint Bottle (.47 L)					*CC2843



## ES Compleat Glycerin

- Extended Service Interval of 150,000 mi (250,00 km) or 4000 Hours
- Uses Non-toxic Glycerin from Renewable Sources such as a By-product of Biodiesel Manufacturing and Contains No EG or PG
- Non-hazardous Shipping Classification
- Freeze Protection to -26 °F (-32 °C)
- Superior Liner Pitting, Corrosion, Aluminum and Solder Protection
- Pre-diluted (50/50), No Mixing Required

	ES Compleat Glycerin
Bulk	CC36004
275 Gal. Tote (1040 L)	CC36003
55 Gal. Drum (208 L)	CC36002
5 Gal. Pail (19 L)	CC36001
1 Gal. Bottle (3.785 L)	CC36000



## Fleetcool™ & Fleetcool Recycled

- Standard Lifetime Coolant with 30,000 mi (50,000 km) or 700 Hours Service Interval
- Excellent Liner Pitting, Scale and Corrosion Protection
- Maintain with DCA 2 or DCA 4 Liquids or Filters
- Meets ASTM 6210, TMC RP329 and Performance Specifications of all Major OEMs
- Recycled Formulation: Ethylene Glycol Purified to Meet ASTM E1177 Specifications for Virgin Glycol and U.S. Military/Government Requirements: CID A-A 52624A

	EG Concentrate	*EG PreMix	Recycled EG PreMix
Bulk	*CC8965	*CC8970	*CC2674
275 Gal. Tote (1040 L)	CC8966	CC8971	
55 Gal. Drum (208 L)	CC8967	CC8972	CC2675
5 Gal. Pail (19 L)	CC8968	CC8973	
6/ 1 Gal. Bottle (3.78 L)	CC8969	CC8974	

\* All PreMix part numbers are 50% glycol / 50% water (50/50) unless otherwise noted. When noted, the first number indicates % glycol followed by the % water.

\* Currently available in US only.



## Heavy Duty Antifreeze/Coolant

- Ethylene Glycol Low Silicate Formula
- Standard Corrosion Protection to Meet ASTM 4985 Specifications
- Add Liquid Supplemental Coolant Additives for Liner Pitting Protection
- Available in Ethylene Glycol and Less Toxic Propylene Glycol Formulations

	Heavy Duty EG Concentrate	*Heavy Duty EG PreMix	Heavy Duty PG Concentrate
Bulk	*CC2557	*CC2558	
55 Gal. Drum (208 L)	CC2556		CC2758
6/ 1 Gal. Bottle (3.78 L)	CC2551		*CC2757



## ES Compleat™ HTF

- Fully Formulated Heat Transfer Fluid
- Contains DCA4 for Solid Liner Pitting, Scale, and Corrosion Protection
- Meets ASTM D-4985, SAE 1941 and GM 1899 Specifications
- Common Applications Include Refrigeration Systems, Heat Tracing Systems, Gas Compressor Engines, Well and Pipeline Heaters, Etc.

	HTF EG Concentrate	*HTF EG PreMix	HTF PG Concentrate	*HTF PG PreMix
Bulk	*CC2561	*CC2562	*CC2563	*CC2564
Bulk		*CC2565 60/40		*CC2566 60/40
Bulk		*CC2573 40/60		
55 Gal. Drum (208 L)		CC2568	CC2569	CC2570



## Liquid Supplemental Coolant Additives (SCAs)

### DCA2

- Standard Corrosion Protection Using Borate/Nitrite Based Inhibitor Package

### DCA4

- Superior Liner Pitting, Scale & Corrosion Protection Using Phosphate/Molybdate Based Inhibitor Package

	DCA2™	DCA4™
12/ 1 Pint Bottle (.47 L)	DCA30L	DCA60L
6/ 1/2 Gal. Bottle (1.89 L)	DCA35L	DCA65L
6/ 1 Gal. Bottle (3.78 L)	DCA40L	DCA70L
5 Gal. Pail (19 L)	DCA45L	DCA75L
55 Gal. Drum (208 L)	DCA50L	DCA80L

\* All premix part numbers are 50% glycol / 50% water (50/50) unless otherwise noted. When noted, the first number indicates % glycol followed by the % water.

\* Currently available in US only.

# Coolant Filtration

Coolant filtration is proven to reduce wear and to maintain all cooling system components. Additionally, water filters can provide a convenient and reliable method for delivering supplemental coolant additives into the cooling system to improve performance and extend coolant service life.



## Extended Service Water Filters

- Easy Maintenance every 12 months, 150,000 miles (250,000 km), or 4000 hours
- Patented Slow-Release Mechanism Replenishes Chemicals Depleted by Use
- StrataPore™ Multilayer Media Offers Superior Durability, Efficiency and Capacity
- Improved Mechanical Design for Increased Durability and Corrosion Resistance

Part #	Slow Release Coolant Additive	Thread Size
WF2121	15 units DCA 4	11/16-16 UN- 2B
WF2124	15 units DCA 4	3/4-20 UNEF- 2B
WF2128	15 units DCA 4	M16 X 1.5-6H INT
WF2126	8 units DCA 4	M36 X 2-6G INT
WF2131	15 units DCA 2	11/16-16 UN-2B
WF2133	15 units DCA 2	3/4-20 UNEF-2B
WF2138	15 units DCA 2	M16 X 1.5-6H INT
WF2136	15 units DCA 2	1-16 UN-2B

Part #	Extended Service Coolant Additive	Thread Size
WF2122	Non-Chemical	11/16-16 UN- 2B
WF2129	Non-Chemical	M16 X 1.5-6H INT
WF2134	Non-Chemical	3/4-20 UNEF- 2B
WF2123	Non-Chemical	11/16-16 UN- 2B
WF2130	Non-Chemical	M16 X 1.5-6H INT
WF2139	Non-Chemical	11/16-16 UN- 2B
WF2127	Non-Chemical	M36 X 2-6G INT
WF2137	Non-Chemical	1-16 UN-2B



## Standard Service Water Filters

- For Use Up to 500 hours or 25,000 miles (40,000 km)
- Immediate Release SCA for Use with Any Coolant at Standard Service Interval
- High Quality Filtration for Efficient Removal of Harmful Contaminants

Part #	Immediate Release Coolant Additive	Thread Size
WF2093	5 units DCA4	11/16-16 UN- 2B
WF2070	2 units DCA4	11/16-16 UN- 2B
WF2071	4 units DCA4	11/16-16 UN- 2B
WF2072	6 units DCA4	11/16-16 UN- 2B
WF2073	8 units DCA4	11/16-16 UN- 2B
WF2087	9 units DCA4	11/16-16 UN- 2B
WF2151	4 units DCA4	11/16-16 UN- 2B
WF2015	8 units DCA4	3/4-20 UNEF- 2B
WF2074	12 units DCA4	5.43 (137.92)
WF2075	15 units DCA4	11/16-16 UN- 2B
WF2076	23 units DCA4	11/16-16 UN- 2B
WF2083	4 units DCA4	3/4-20 UNF-2B
WF2104	15 units DCA4	11/16-16 UN- 2B
WF2106	4 units DCA4	11/16-16 UN- 2B

Part #	Immediate Release Coolant Additive	Thread Size
WF2108	8 units DCA4	M16 X 1.5-6H INT
WF2022	11 units DCA4	1-16 UN-2B
WF2082	6 units DCA4	1-16 UN-2B
WF2051	4 units DCA2	11/16-16 UN- 2B
WF2088	6 units DCA2	11/16-16 UN- 2B
WF2054	15 units DCA2	11/16-16 UN- 2B
WF2144	12 units DCA2	11/16-16 UN- 2B
WF2096	4 units DCA2	M16 X 1.5-6H INT
WF2145	18 units DCA2	11/16-16 UN- 2B
WF2053	8 units DCA2	11/16-16 UN- 2B
WF2055	23 units DCA2	11/16-16 UN- 2B
WF2091	14 units DCA2	11/16-16 UN- 2B
WF2056	34 units DCA2	11/16-16 UN- 2B



## Non-Chemical Filters

- For Use Up to 500 hours or 25,000 miles (40,000 km)
- High Quality Filtration for Efficient Removal of Harmful Contaminants

Part #	Thread Size
WF2077	11/16-16 UN- 2B
WF2078	3/4-20 UNF-2B
WF2101	11/16-16 UN- 2B

Part #	Thread Size
WF2109	M16 X 1.5-6H INT
WF2084	11/16-16 UN- 2B
WF2107	11/16-16 UN- 2B





## Filter Head Assembly

- Head Assembly for Installation on Engines without Water Filtration Capability
- Assemblies Provide Everything Needed to Achieve Benefits of Coolant Filtration

Part #*	Description	Style	Port Size	Thread Size
204163 S	Water Filter Spin-On Head	Aluminum	3/8" NPT	11/16-16 UN- 2B
215617 S	Dual Water Filter Spin-On Heads	Aluminum	1/2" NPT	11/16-16 UN- 2B
256535 S	Filter Head Mounting Bracket	N/A	N/A	N/A
257715 S	Water Filter Head (204163 S) and Mounting Bracket Assembly	Aluminum Head	3/8" NPT	11/16-16 UN- 2B
3904378 S	Severe Duty Water Filter Head	Steel	3/8" NPT	11/16-16 UN- 2B

\* Severe Duty Filter Head is recommended for most applications.

## Coolant Testing

Every good cooling system maintenance program should include regular coolant testing to determine if the proper level of protection is present or if contaminants exist. A good coolant testing program eliminates guesswork and allows the cooling system to maintain peak performance.



### 3-Way™ SCA/Freeze Point Strips

- Measures Protection against Liner Pitting, Corrosion and Coolant Dilution
- Easy to Use Test Strips Measure Freeze Point and Molybdate/Nitrite
- Results in 45 – 75 Seconds

50/Bottle	25 4-Packs/Box	100 Singles/Box	50/Bottle (Metric)	25 4-Packs (Metric)
CC2602	CC2602A	CC2602B	CC2602M	CC2602AM



### QuikChek™ Coolant Quality Strips

- Easy to Use Test Strips Measure Levels of pH, Sulfate and Chloride for Overall Coolant Quality
- Minimizes Unnecessary Draining of Coolant still within Specifications

10/Bottle	CC2718
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### 2-Way™ Glycerin Coolant Test Kit

- Easy to Use Test Strips Measure Nitrite and Molybdate levels
- Designed specifically for use with ES Compleat Glycerin

50/Bottle	CC36050
100 Singles/Box	CC36050B



### Water-Chek™ 3-Way Strips

- Determines if Coolant Make-Up Water Meets OEM, TMC and ASTM specifications
- Easy to Use Test Strips Measure pH, Chloride and Hardness

100 Singles/Box	CC2609
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## Refractometer

- Determines the Freeze Point Protection for Coolants
- More Accurate than Test Strips or Float-Type Hydrometers
- Durable Storage Case Included

Ethylene Glycol or Propylene Glycol	CC2806
Glycerin	CC36049



## Monitor-C™ Laboratory Testing – Coolant Analysis

- Expert Laboratory Analysis with On-line Reporting, Results in 24 Hours
- Measures Molybdate, Nitrate, pH, Hardness, Chloride, Sulfates, Corrosion Products (iron, lead, etc), and Silicates
- Tests for Freeze/Antifreeze Points, TDS and Buffers
- Available in Both Standard Packaging and with a Prepaid Mailer

<b>Standard Kit</b>	<b>Standard Kit with Prepaid Mailer</b>
CC2700	CC2706

## Cooling System Cleaners

Cummins Filtration offers two types of cleaners to keep your cooling system in top condition. Both Restore™ and Restore Plus™ remove contaminants without harming metal surfaces, gaskets, hoses or plastic parts. They are also approved by Cummins® as the preferred product for cleaning oil contaminated cooling systems under warranty maintenance.



### Restore™

- Alkaline-Based Cleaner
- Most Effective Cooling System Oil/Fuel Contamination-Cleaning Agent on Market
- 10 Times More Effective than Automotive Distributor Detergent Powders
- Safe for Use in Aluminum Radiators and Heaters
- Removes Silicate Gel

	<b>Restore</b>
1 Gal. Bottle (3.78 L)	CC2610
55 Gal. Drum (208 L)	CC2612



### Restore Plus™

- Mild Acid-Based Chelating Cleaner
- Safely Removes Rust, Corrosion, Scale, and Solder Bloom – Without Disassembling your Cooling System

	<b>Flash Rust Inhibitor</b>
1 Gal. Bottle (3.78 L)	CC2638
55 Gal Drum (208 L)	CC2637

Have a technical question about a Cummins Filtration product? From filtration and exhaust systems to coolant products, we can answer your most pressing maintenance questions.

## Coolant Product Glossary

**Antifreeze:** A formula with ethylene glycol or propylene glycol base that contains supplemental coolant additives (SCAs) and/or Organic Acids to prevent corrosion, foaming and other damage to cooling system components. It must be mixed with water before it is used! The most common mixture is 50% each.

**ASTM:** American Society for Testing of Materials ([www.astm.org](http://www.astm.org)), the most important standards-setting organization in the world, publishes specifications most commonly cited, ASTM D-3306 for cars and ASTM D-6210 (new) and ASTM D-4985 (old) for trucks.

**Borate:** A pH buffer used in some antifreezes and SCAs (supplemental coolant additives) to maintain the pH of coolant as it ages.

**Carboxylates:** Organic acids that have the chemical fragment COOH in the molecule. In orange coolant, such as GM DEXCOOL<sup>®</sup>, some of the anti-rust inhibitors are from this chemical family.

**Charge:** To charge or pre-charge a heavy-duty coolant, add 3% SCA to a 50% low silicate ASTM 4985 specification antifreeze and 50% water mix. In water, 6% SCA is usually the pre-charge dose.

**Coolant:** The fluid formulation in the cooling system, usually half antifreeze and half water.

**Coolant Filter:** A filter through which coolant flows and widely used as delivery device for SCA chemicals. Care is necessary to ensure the proper application, containing the proper chemical dose, is used. Extended life, slow release coolant filters are now used with extended life coolants.

**DI Water:** Water purified by deionization. It is chemically pure and contains no calcium, magnesium, chloride or sulfate as found in many tap waters. It is recommended as the make-up for coolant, especially extended service coolants.

**Esters:** A chemical family found in some recycled antifreezes. These chemicals quickly deplete the inhibitor package, acidify the coolant and cause catastrophic cooling system failure in remarkably short periods of time.

**Ethylene Glycol:** The most common antifreeze base. At 50% in water, EG antifreeze provides freeze protection to -34° F. EG can be harmful if ingested.

**Freeze Point:** The point where ice crystals begin to form in coolant as stated by ASTM method D 1177.

**Fully Formulated:** This term describes the new heavy-duty coolants that contain all chemicals necessary to protect diesel as well as automotive cooling systems. The ASTM specification for fully formulated coolant, ASTM D-6210, requires simultaneous compliance with all of the previous automotive and heavy-duty specifications. Therefore, this is a true universal antifreeze specification and may be used in any system.

**Hybrid Coolant:** Coolant made with a chemical additive package that contains a combination of organic acids and conventional corrosion inhibitors.

**Molybdate:** In the Fleetguard DCA-4, SCA, and coolant technology, a component to prevent cylinder liner cavitation and protect hard and soft metals from corrosion.

**Nitrate:** A general anti-corrosion additive that is especially effective in protecting aluminum and solder.

**Nitrite:** Additive present in all good SCAs and fully formulated antifreezes (ASTM spec D-6210) that is the most important additive for preventing cylinder liner cavitation.

**Organic acid:** A large family of chemicals usually used to refer in antifreeze discussions to carboxylate inhibitors (see carboxylates).

**pH:** A scale that indicates the acidity or alkalinity of a fluid or solution. The scale runs from 0 to 14 with values below 7 being acidic and those above 7 being alkaline. Antifreeze/coolant and SCA solutions run in the alkaline to mildly alkaline range of 7.5 to 11.0. A coolant or SCA solution will become unstable if the pH drops too much with use. Minimum acceptable pH depends on the type of coolant. Rapid additive depletion/precipitation and corrosion is likely once the coolant pH falls below the lower limit.

**Phosphate:** A pH buffer used in many coolants. Detroit Diesel<sup>®</sup> does not recommend phosphated coolants.

**Pre-charged:** A term to describe antifreeze that contains SCA. It is now obsolete; the term fully formulated is preferred.

**Propylene Glycol:** An alternative, slightly more expensive antifreeze base fluid that is environmentally friendlier than ethylene glycol due to its lower toxicity. Provides excellent corrosion protection.

**Reserve Alkalinity:** The ability of a coolant to resist aging as reflected by the amount of hydrochloric acid required to put the pH down to 5.5 in an ASTM test.

**SCA:** An acronym for supplemental coolant additive which is a chemical package added to coolant either as a liquid, powder or charge inside a filter to fortify the coolant's anticorrosive and other desirable properties. SCAs that meet the ASTM SCA specification are strongly preferred for maximum protection.

**Silicate:** The best protection against aluminum corrosion. However, silicate has limited solubility in coolant and is often associated with radiator plugging in poorly formulated coolants or SCAs. High quality coolants contain silicate stabilizers.

**Silicate stabilizer:** A chemical used in the best coolants and SCAs to prevent silicate drop-out, which may cause problems.

**Specific Conductance:** A coolant's ability to resist carrying an electrical current between dissimilar metals. Excessive levels can be due to improper source water, high metal corrosion or over-treatment with SCAs.

**Total Dissolved Solids:** A measure of the total amount of additives, make-up water minerals, and contaminants in a coolant.

**Total Hardness:** A calculation of calcium carbonate and magnesium carbonate - an indication of scale deposit formation. ASTM, TMC, and OEM specifications are based on Total Hardness.



### Fleetguard<sup>®</sup> Fuel Additives: REAL<sup>™</sup> Solutions

We also provide a wide range of fuel additives that are designed to provide REAL solutions to the challenges of today's modern fuels and fuel systems. Our broad product line provides solutions for cold weather operations, fuel system performance improvement, as well as emissions control support. To learn more about our fuel additives, see our Fuel Additives Brochure LT36049 available on [cumminsfiltration.com](http://cumminsfiltration.com).

For more detailed technical information about all products featured in this brochure, please refer to the **Fleetguard Technical Information Catalog, LT32599**. Some part numbers may not be available in all countries. Contact your local customer assistance center for product availability.



**Filtration**

For more information, visit  
[cumminsfiltration.com](http://cumminsfiltration.com)

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