

## Health and Safety

Under normal conditions of intended use, these products do not pose a risk to health. Excessive exposure may result in eye, skin or respiratory irritation. Always observe good hygiene measures. Read and understand the Material Safety Data Sheet (MSDS) before using this product. For a copy of the MSDS, visit us on the web at [www.catmsds.com](http://www.catmsds.com).

### Cat® ELC™



#### Recommended Use

- Cat ELC meets or exceeds the requirements of the following specifications and guidelines:
- Cat EC-1
- ASTM D-3306
- ASTM D-6210
- TMC RP-329
- TMC RP-338
- SAE J1034
- Cat ELC also meets the performance requirements of Cummins, Detroit Diesel, International, Mack and Volvo.

#### Discover the Difference

- Cat ELC is developed, tested and approved by Caterpillar to meet the same high standards as Genuine Cat Parts.
- Factory-Fill — Used as standard factory-fill for all Cat machine cooling systems.
- Lower Maintenance Costs — Reduces engine coolant and additive costs by as much as 500% compared to conventional coolants. Cat ELC eliminates the need for supplemental coolant additives, extends coolant change-out intervals and reduces disposal requirements.
- Advanced Metal Protection — Incorporates an advanced formula technology with organic acid additive corrosion inhibitors, such as a combination of mono and dicarboxylates for maximum protection of copper, solder, brass, steel, cast iron and aluminum.

Typical Characteristics{A}	
Color	Strawberry Red
Boiling protection with 1 bar (15 psi) radiator cap	
50% Cat ELC/50% water	129° C (265° F)
60% Cat ELC/40% water (ELC concentrate added)	132° C (270° F)
Freezing protection	
50% Cat ELC/50% water	-37° C (-34° F)
60% Cat ELC/40% water (ELC concentrate added)	-52° C (-62° F)
Nitrite (50% solution)	500 ppm
Molybdate (50% solution)	530 ppm

{A} The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

Metric Volume (L)	English Volume (gal)	Part Number
Cat ELC Concentrate		
--	1	119-5150
Cat ELC — 50/50 Premix		
--	1	101-2844
--	5	129-2151 <sup>1</sup>
--	55	101-2845 <sup>1</sup>
--	275	222-1534 <sup>1</sup>
--	Bulk	156-2653 <sup>1</sup>

(Continued)

**Cat® ELC™ (Continued)**

Metric Volume (L)	English Volume (gal)	Part Number
Cat ELC Concentrate (with embitterment)		
--	1	238-8647 <sup>3</sup>
5	--	205-6615 <sup>4</sup>
Cat ELC Premix 50/50 (with embitterment)		
--	1	238-8648 <sup>2</sup>
--	5	238-8649 <sup>2</sup>
--	55	238-8650 <sup>2</sup>
5	--	205-6611 <sup>3</sup>
25	--	205-6612 <sup>3</sup>
210	--	205-6613 <sup>3</sup>
1000	--	205-6614 <sup>3</sup>
1000	--	237-4953 <sup>4</sup>
5	--	215-4245 <sup>5</sup>
20	--	215-4246 <sup>5</sup>

<sup>1</sup> NACD — Only<sup>2</sup> NACD — North America<sup>3</sup> EAME — Europe, Africa, Middle East<sup>4</sup> APD — Australia<sup>5</sup> LACD — Brazil**Cat® ELC Extender****Recommended Use**

- Exceeds Cat EC-1 performance requirements.
- Protects against cylinder liner/block pitting and cavitation erosion.
- Should be added at 500 000 km (300,000 miles) for Cat On-Highway Trucks and 6,000 hours for commercial engines.
- Extender is only necessary once during the life of the coolant.
- Ensures Cat ELC performance to 1 000 000 km (600,000 miles) or 12,000 hours.

**ELC Extender and Flush Intervals**

Cat ELC Extender should be added after 6,000 hours or 500 000 km (300,000 miles) of operation, and the system should be drained and flushed with clean water after 12,000 hours or 1 000 000 km (600,000 miles). No cleaning agents are needed.



Metric Volume (L)	English Volume (gal)	Part Number
Cat ELC Extender		
--	>0.250 (1 qt)	119-5152
--	1	210-0786
1	--	215-4241 <sup>1</sup>
5	--	219-3039 <sup>1</sup>

<sup>1</sup> LACD — Brazil

## Cat® DEAC™



### Recommended Use

- Cat DEAC is approved for use in all Cat machines, commercial engine and truck engine applications and most diesel, gas or natural gas engines made by other manufacturers.
- Cat DEAC meets the following ASTM standards:
- ASTM D6210 (Heavy-duty antifreeze/coolants)
- ASTM D3306 (Automotive applications)
- ASTM D4656 (Automotive applications)
- ASTM D1384 (Glassware corrosion test)

### Discover the Difference

- Cat DEAC is developed, tested and approved by Caterpillar to meet the same high standards as Genuine Cat Parts.
- Excellent Performance — Contains organic and inorganic corrosion inhibiting and anti-foam additives, and provides superior protection against pitting, corrosion and freezing down to -37° C (-34° F).
- Convenience — Fully formulated, no pre-mixing with supplemental coolant additive required at initial fill. Concentrate available in 1- and 55-gallon containers for top-off.

Typical Characteristics{A}	
Color	Magenta
Boiling protection °C (°F) 15 psi pressure cap (ASTM D1177)	
50% Cat DEAC/50% water	129 (265)
60% Cat DEAC/40% water (maximum)	132 (270)
Freezing protection °C (°F)	
50% Cat DEAC/50% water	-37 (-34)
60% Cat DEAC/40% water (maximum)	-52 (-62)
Silicate (concentrate) SiO <sub>2</sub>	900-1100 ppm
Ethylene Glycol (% volume)	95.2% min.
Inhibitors Additives (% volume)	4.3-4.8%

{A} The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

Metric Volume (L)	English Volume (gal)	Part Number
Cat DEAC — Concentrate		
--	1	8C-3684
--	55	8C-3686
--	Bulk	156-2649
Cat DEAC — Concentrate Embittered		
--	1	238-8651
--	55	238-8653
20	--	9X-6585 <sup>1</sup>
Bulk	--	2P-9868 <sup>1</sup>
Cat DEAC — 50/50 Premix		
--	Bulk	156-2650
20	--	3E-9441 <sup>1</sup>
205	--	3E-9440 <sup>1</sup>

<sup>1</sup>EAME — Europe, Africa, Middle East

**Cat® SCA****Application**

- For regular maintenance use with Cat DEAC low silicate heavy-duty diesel engine coolants, including glycol-based antifreezes.

**Features**

- Helps stop rust and mineral deposits from forming in the cooling system.

**Benefits**

- Protects all metals.
- Protects against cylinder liner cavitation and corrosion.
- Will not affect gaskets or hoses.



Metric Volume (L)	English Volume (gal)	Part Number
Cat SCA for DEAC		
--	0.063 (½ pint)	6V-3542
--	0.125 (1 pint)	8T-1589
--	0.250 (1 qt)	3P-2044
--	5	8C-3680
--	55	5P-2907
1	--	217-0616
20	--	217-0617
208	--	217-0618

**Cat® NGEC™****Recommended Use**

Cat NGEC Premix 50/50 is a heavy-duty cooling system fluid especially designed to provide superior protection against pitting, freezing, and corrosion in Cat natural gas engines. It protects all metals including aluminum.

**Discover the Difference**

- Cat NGEC is developed, tested and approved by Caterpillar to meet the same high standards as Genuine Cat Parts.
- Fully Formulated — Does not require an initial supplemental cooling additive.
- Quick, easy servicing.
- Superior Protection — Contains both organic and inorganic corrosion inhibitors as well as anti foam additives. It provides superior protection against pitting, corrosion and freezing down to -37° C (-34° F).

Typical Characteristics{A}	
Color	Purple
Boiling protection with 15 psi pressure cap °C (°F) (ASTM D1177)	
50% Cat NGE/50% water	265 (129)
60% Cat NGEC/40% water (concentrate added)	270 (132)
Freezing protection °C (°F)	
50% Cat NGEC/50% water	-34 (-37)
60% Cat NGEC/40% water (maximum)	-62 (-52)
Ash content, % wt. (ASTM D1119)	0.60
Silicate (concentrate) SiO <sub>2</sub> (ppm)	450-550
Ethylene Glycol (% volume)	45.3
Inhibitors Additives (% volume)	2.2-2.4

{A} The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

(Continued)

## Cat® NGE<sup>™</sup> (Continued)

Metric Volume (L)	English Volume (gal)	Part Number
--	1	233-9797
--	5	233-9798
--	55	233-9799
--	275	239-3649

### Cooling System Cleaner — Standard



#### Applications

- Cooling system cleaner; full effect after several weeks in the cooling system.
- Not for use in removing large amounts of oil from cooling systems.

#### Features

- Removes scale or lime deposits.

#### Benefits

- Cleans cooling system while the machine works.

Metric Volume (L)	English Volume (gal)	Part Number
--	0.500 (2 qt)	6V-4511 <sup>1</sup>
1.89	--	185-5121 <sup>2</sup>

<sup>1</sup> NACD — North America

<sup>2</sup> EAME — Europe, Africa, Middle East

### Cooling System Cleaner — Quick Flush



#### Applications

- For use as preventative maintenance or as a short-time flush at the time of coolant change.
- Not for use in removing large amounts of oil from cooling systems.

#### Features

- Removes limes, scale and solder bloom.

#### Benefits

- Allows for one-step cleaning in just 90 minutes.

Metric Volume (L)	English Volume (gal)	Part Number
--	0.125 (1 pt)	4C-4609
--	0.250 (1 qt)	4C-4610
--	1	4C-4611
--	5	4C-4612
--	55	4C-4613

## Cooling Conditioner Test Kit

### Applications

- Simple dip test takes just minutes to perform.

### Features

- Does not require dilution, titration or drops to count.

### Benefits

- Includes a color density change for people with color blindness.



Product	Part Number
Coolant Conditioner Test Kit (100 test strips, sample, bottle, pipette)	4C-9301
Refill test strips	4C-9297

## ELC™ Dilution Test Kit

- Tests reserve alkalinity and contamination.
- Used to test inhibitor level of Cat ELC.
- Simple pass/fail system is indicated by color.
- Disposable — kit contains pre-measured chemicals in sample tubes.



Product	Part Number
ELC Dilution Test Kit (100 test strips, sample, bottle, pipette)	233-9116

## Battery and Coolant Refractometer

- Used to measure freezing point of coolants plus battery charge condition.
- Refractometer uses a prism and lens with simple focus adjustment to provide accurate and repeatable measurements on easy to read scales.
- Easy to operate.
- Automatic temperature compensation (ATC).
- Requires only 2 to 3 drops of solution.
- Carrying case and calibration screwdriver included.
- Reads degrees Centigrade and Fahrenheit.



Range	Resolution
-60 to 32° F propylene glycol freeze point	10° F
-50 to 0° C ethylene glycol freeze point	5° C
1.15 to 1.30 specific gravity of battery acid	0.01

Product	Part Number
Battery and Coolant Refractometer	245-5829