

<b>Type</b>	ES Compleat™ EG Antifreeze/Coolants are Extended Life formulations that contain Ethylene Glycol (EG) base fluids and are designed specifically for Extended Service use in heavy duty diesel engines. ES Compleat is specifically designed for use with ES Slow Release coolant filters or liquid ES Extender to provide simplified coolant maintenance while extending coolant service intervals to 150,000 miles (260,000 km) or 4000 hours of operation. ES Compleat can also be used in standard service maintenance intervals with the use of Supplemental Coolant Additives (SCA) and standard coolant filters.
<b>Composition</b>	ES Compleat EG Concentrate mixes readily with clean tap water or demineralized water, while ES Compleat EG Premix is formulated with demineralized water and is ready to use. Both EG antifreeze products are low silicate, contain a full charge of heavy duty chemical inhibitors and are compatible with SCA chemical filters. ES Compleat EG Antifreezes are formulated with Borate/Nitrite chemistry recommended for use in heavy duty diesel engines.
<b>Application</b>	ES Compleat EG antifreezes are universal products highly recommended for use in all Cummins and similar types of heavy duty diesel engines, and also for use in automobile and light duty applications.
<b>Benefits</b>	<ul style="list-style-type: none"> <li>• Compatible with all other coolants</li> <li>• Lifetime coolant with service interval at 150,000 miles, 260,000 kilometers or 4000 hours</li> <li>• Provides freeze protection up to -34 °F (-37 °C) at 50/50 premix and -65 °F (-54 °C) at 60/40 premix</li> <li>• Fully formulated coolant – does not require SCA precharge</li> <li>• Maximum corrosion protection with conventional heavy duty chemical inhibitors and organic acids</li> <li>• Maximum liner pitting protection</li> <li>• Eliminate hard water scale deposits</li> <li>• Low TDS and silicate levels</li> </ul>

ES Compleat EG Antifreeze Coolants are considered Lifetime Coolants, meet or exceed the performance requirements of the following specifications, and meet the low silicate limits of GM6038M antifreeze formulation requirements:

TMC RP 338 Extended Life	Cummins® CES 14603	Navistar®
TMC RP 329	Cummins SB 3666132	Freightliner® 48-22880
ASTM D-6210	Caterpillar®	Volvo®
ASTM D-4985	Detroit Diesel® 7SE298	PACCAR®
ASTM D-3306	John Deere® 8650-5	Mack® 014G817004
CID-A-A-52624	Thermo-King®	EMD® M.I. 1748E
GM® 1899	Case New Holland®	Waukesha® 4-1974D

Coolant products vary by region. For product formula and availability, contact your local Customer Assurance Center.

## Specifications

Specification	Performance Standard	EG Concentrate	EG Premix 50/50	EG Premix 60/40	Liquid Extender
Color	Visual	Blue	Blue	Blue	Blue
Specific Gravity @ 60 °F (15.56 °C) @ 68 °F (20 °C)	D1122 D1122	1.13	1.072 1.070	1.084 1.082	– 1.110
Density	–	9.43 lb/gal (1.13 kg/L)	8.944 lb/gal (1.072 kg/L)	9.044 lb/gal (1.084 kg/L)	9.261 lb/gal (1.110 kg/L)
pH (undiluted)	D1127	10.5	10.0	10.5	10.5 @ 3% bv
Reserve Alkalinity (undiluted)	D1121	5.0	3.0	3.8	–
Freeze Point (undiluted)	D1177	8 °F (-13.33 °C) min.	-35.8 °F (-37.68 °C) min.	-54 °F (-47.78 °C) min.	–
Boiling Point (undiluted)	D1120	330 °F (165.56 °C)	226 °F (107.78 °C)	231 °F (110.56 °C)	–
Water by Weight (approx.)	D1123	4.0%	48.99% max.	40.18%	–
Total Glycol by Weight	–	95.0% min.	50.19% min.	58.87%	–
Glassware Corrosion Test	D1384	Pass	Pass	Pass	–
Water Pump Cavitation Test	D2809	Pass	Pass	Pass	–
Aluminum Corrosion Test	D4340	Pass	Pass	Pass	–
Simulated Service Test	D2570	Pass	Pass	Pass	–
Ash Content by Mass	D1119	0.80%	0.40%	0.40%	–
Chloride by Weight	D2570	< 25 ppm	< 25 ppm	< 25 ppm	–

## Ordering Information

Part Number	Product	Package Size	Case Qty.
CC2822	ES Compleat™ EG Concentrate	Bulk	N/A
CC2823	ES Compleat EG Concentrate	275 gal (1040.99 L)	1
CC2821	ES Compleat EG Concentrate	55 gal (208.20 L)	1
CC2847	ES Compleat EG Concentrate	5 gal (18.93 L)	1
CC2820	ES Compleat EG Concentrate	1 gal (3.78 L)	6
CC2827	ES Compleat EG Premix 50/50	Bulk	N/A
CC2834	ES Compleat EG Premix 50/50	275 gal (1040.99 L)	1
CC2826	ES Compleat EG Premix 50/50	55 gal (208.20 L)	1
CC2848	ES Compleat EG Premix 50/50	5 gal (18.93 L)	1
CC2825	ES Compleat EG Premix 50/50	1 gal (3.78 L)	6
CC2862	ES Compleat EG Premix 60/40	Bulk	N/A
CC2863	ES Compleat EG Premix 60/40	55 gal (208.20 L)	1
CC2841	ES Compleat Liquid Extender	55 gal (208.20 L)	1
CC2842	ES Compleat Liquid Extender	5 gal (18.93 L)	1
CC2840	ES Compleat Liquid Extender	1 qt (0.95 L)	6
CC2843	ES Compleat Liquid Extender	1 pt (0.47 L)	12

Part Number	Product	Package Size	Case Qty.
CC2822M	ES Compleat™ EG Concentrate	Bulk	N/A
CC2851M	ES Compleat EG Concentrate	1000 L (264.17 gal)	1
CC2821M	ES Compleat EG Concentrate	208 L (54.95 gal)	1
CC2749M	ES Compleat EG Concentrate	20 L (5.28 gal)	1
CC2747M	ES Compleat EG Concentrate	5 L (1.32 gal)	4
CC2827M	ES Compleat EG Premix 50/50	Bulk	N/A
CC2852M	ES Compleat EG Premix 50/50	1000 L (264.17 gal)	1
CC2826M	ES Compleat EG Premix 50/50	208 L (54.95 gal)	1
CC2750M	ES Compleat EG Premix 50/50	20 L (5.28 gal)	1
CC2748M	ES Compleat EG Premix 50/50	5 L (1.32 gal)	4

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