



PGPlus®

PREMIUM HEAVY DUTY
ENGINE COOLANT

PREMIX

- ▶ 5 YEAR LIFE
- ▶ 1,000,000 KMS / 20,000 HRS



PROTECTING YOU, YOUR ENGINE AND YOUR ENVIRONMENT

PGPlus® Heavy Duty Engine Coolant and Service Interval Requirements

Fleetguard PGPlus is a fully formulated Propylene Glycol based 50/50 premixed diesel engine coolant that provides anti-freeze/anti-boil protection, assists the transfer of heat and protects the engine from corrosion, scale and liner cavitation.

APPLICATION: For all heavy duty diesel and gas engines across mining, construction, agricultural, power gen-sets and on-highway diesel applications.

PREMIXED: Comes premixed with demineralised water and is ready-to-use from the container. This removes problems associated with using poor quality water (e.g. water hardness, chlorides).

SAFE TO HANDLE: As Fleetguard PGPlus is propylene glycol based, it is safe to handle, has low toxicity; no poison schedule number and no dangerous goods class which means it can be handled, stored and used safely on site. It is a safer alternative than ethylene glycol whilst offering similar fluid properties when formulated as a premixed coolant.

SERVICE LIFE: 1 million kms, 20,000 hrs or 5 years. PGPlus will last the life of the engine with testing & good maintenance.

MAINTENANCE: Many applications, such as on-highway trucks, require the chemical additives to be replenished during the coolant's service period. Fleetguard Extended Service (ES) water filters are constructed to meet a 1 year, 250,000 kms or 4,000 hrs maintenance interval and can be supplied as either "non-chemical" (for filtration only), or with slow release chemical additives that replenish additives as they are needed during service. This controlled release helps to prevent over dosing issues which can occur if cooling systems are over-serviced with standard service chemical filters or DCA4 liquid.

A second option is to use DCA4 liquid additive in combination with ES water filters (where fitted). Standard Service (SS) water filters are available as "non-chemical" or with immediate release chemical additives.

These water filters are intended for more frequent servicing and should be replaced every 20,000 kms or 250 hrs (approx. every oil change).

Always follow the OEM requirements for cooling system maintenance. No DCA4 is required for the initial fill.

TESTING: Easy to use test strips (CC2602M or CC2602AM) monitor glycol and additive (measured as SCA levels [nitrite/molybdate]) to flag coolant dilution and additive depletion. Propylene Glycol concentration can be monitored with a refractometer (CC2800).

For further information on Fleetguard's range of ES water filters, maintenance requirements and part recommendations, refer to: *Fleetguard Products & Parts Technical Information Catalogue - Section 7: Water Filters (LT32599)*. Available on-line under Resources > Product Literature at www.fleetguard.com.au

Genuine Serviceability



Available in premix for ease of maintenance, quality and best performance: 4L, 10L, 20L, 208L, 1000L & bulk.

PGPlus is compatible with other antifreeze/coolants and hard water but for best performance it is recommended to drain/flush the old coolant and replace with Fleetguard PGPlus.

System Preparation

1 INSPECT THE COOLING SYSTEM

Check pump, fan, belts, pulleys, hoses, clamps, radiator and cap. Ensure thermostat is operating properly. Repair any faults and leaks.

2 CLEAN SYSTEM

Contaminated cooling systems cannot transfer heat efficiently and may mean protection is compromised. Fleetguard offers two cleaners to address the variety of cleaning needs – Restore™ (for oil, grease, silicate gelation) or Restore Plus™ (for corrosion and scale) which remove contamination without harming the metal surfaces, gaskets, hoses, or plastic parts. Refer to our website to identify the appropriate cleaner for your system.

3 INSTALL A COOLANT FILTER

To ensure your system stays clean, fit the appropriate Fleetguard Extended Service (ES) coolant filter as per the table below. Extended Service chemical coolant filters use slow release inhibitor technology and a single ES water filter will treat cooling systems up to 76 litres. For systems without a water filter fitted, a universal adaptor kit (WFK1) is available.

4 FILL SYSTEM

Fill the cooling system with fully formulated PGPlus which comes formulated with Diesel Coolant Additives (DCA).

Coolant Maintenance (all cooling systems <76 L)

Each year, 250,000 kms or 4,000 hrs, change the Extended Service (ES) slow release coolant filters and if required add DCA4 liquid. This is all that is required to maintain your system over this period. Note that “standard filters” are not robust enough to last this service interval. Although not expected, if the number of SCA units/litre measured during service falls below 0.3 units/litre, also add a PRE-CHARGE volume of DCA4 liquid (refer Service Dose section).

EXTENDED SERVICE (ES) INTERVAL COOLANT FILTERS

ES Filters with Chemical Additives – slow release technology Suitable for systems up to 80 litres

	Thread (inches)
WF2121* slow release ES chemical DCA4+	11/16"-16 UN-2B
WF2124 Mack slow release ES chemical DCA4+	3/4"-20 UNEF-2B
WF2126 Cummins Signature & ISX up to 250,000 km's: non-chemical	M36 X 2-6G INT
WF2128 Volvo slow release ES chemical DCA4+	M16 X 1.5-6H INT
WF2135 Mack slow release ES chemical DCA4+	1"-16 UN-2B

* Fits standard heads for Cummins, Cat, Detroit, Komatsu.

**Offers additional contaminate holding capacity.

For further information on Fleetguard water filters refer to our Coolants & Chemicals Catalogue www.fleetguard.com.au.

ES Filters without Chemical Additives (additive free) Can also be used on systems over 80 litres

	Thread (inches)
WF2122* non-chemical	11/16"-16 UN-2B
WF2123** non-chemical with increased media	11/16"-16 UN-2B
WF2127 Cummins Signature up to 250,000 km's: non-chemical	M36 X 2-6G INT
WF2129 Volvo ES non-chemical	M16 X 1.5-6H INT
WF2130**Volvo ES non-chemical with increased media	M16 X 1.5-6H INT
WF2134 Mack ES non-chemical	3/4"-20 UNEF-2B
WF2137 Mack ES non-chemical	1"-16 UN-2B

Coolant Maintenance (cooling systems >76 L or systems that don't utilise a water filter)

Add DCA4 (liquid) as per the Service Dose below, and install new non-chemical ES coolant filter if applicable.

TESTING: Test the coolant at normal oil service intervals or when major coolant loss occurs or is suspected (min. twice a year) with Fleetguard's 3-Way™ test strips. Adjust if necessary with DCA4. Top up for lost coolant with PGPlus only. **DO NOT ADD WATER** as this will dilute the glycol and chemical balance.

SERVICE DOSE: using DCA4 (liquid) based on Fleetguard's 3-Way™ Test Strip result

Identify the SCA level (units/litre) in your cooling system. If the result is in the “SERVICE” or “PRE-CHARGE” section DCA4 needs to be added to the cooling system in combination with, if applicable, the appropriate Fleetguard non-chemical ES filter.

(TEST) - SCA LEVEL ABOVE 0.8 UNITS PER LITRE

Do not add DCA4 to the system

(SERVICE) - SCA LEVEL 0.3 – 0.8 UNITS PER LITRE

Add DCA4 at a rate of 1% of the cooling system capacity (e.g. 50 litres x 1% = 0.5 litre DCA4),

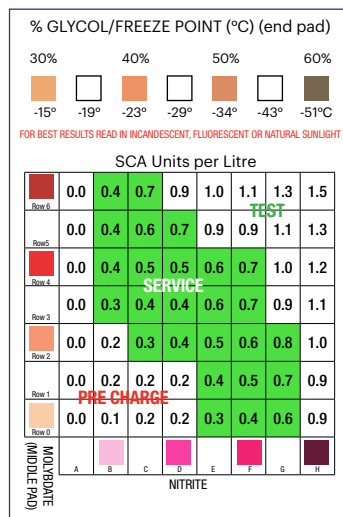
or add 0.1 units DCA4 per litre of cooling system capacity (eg 50 litres x 0.1 units = 5 units DCA4)

(PRE-CHARGE) - SCA LEVEL BELOW 0.3 UNITS PER LITRE

Add DCA4 at a rate of 4% of the cooling system capacity (e.g. 50 litres x 4% = 2 litres DCA4),

or add 0.4 units DCA4 per litre of cooling system capacity (eg 50 litres x 0.4 units = 20 units DCA4)

DCA4 (liquid) is available as:		
Part No.	SCA Units	Pack Size (litres)
DCA 60L	5	0.473
DCA 65L	20	1.89
DCA 75L	200	18.9
DCA 80L	2200	208



NOTE: With servicing, SCA levels should be between 0.3 – 0.8 units per litre. The ideal level is 0.7

Approvals, Standards and Specifications

APPROVED BY:

- Cummins to CES14603 & CS14439
- MTU to MTL 5048 (for cooling systems free of light metal)

STANDARDS:

- ASTM D6210 (heavy duty) & ASTM D3306 (light duty/automotive)
- The Maintenance Council's recommended Practices for Nitrite-Containing Propylene Glycol Base Coolant, and Extended Service Interval Coolant Technologies: TMC RP330 & TMC RP338A

OE SPECIFICATIONS: Can be used in, but not restricted to, the following OE brands: Case New Holland®, Caterpillar®, Cummins®, DAF®, Detroit Diesel®, Freightliner®, IVECO®, John Deere®, Komatsu®, Liebherr®, MACK®, MAN®, Mercedes®, MTU®, Navistar®, PACCAR®, Volvo® and Waukesha®.

PGPlus is fully supported by the Cummins Filtration Global Warranty⁽¹⁾.

Note (1): In the unlikely event that a product defect necessitates repair of the engine or components, Cummins Filtration will reimburse reasonable costs to repair or replace, whichever is less, the damaged engine or components. Equipment warranties should not be voided solely due to the use of Cummins Filtration products. Warranty coverage for PGPlus applies for full fill situations where 100% PGPlus is being used in the application. Cummins Filtration cannot warrant its chemical products if they are mis-applied or used under improper maintenance practices.

Manufactured in Australia by Cummins Filtration.

For all enquiries regarding PGPlus please contact your local Fleetguard stockist or call our Customer Assistance team on 1800 032 037.