

**EVERY™
ALTERNATIVE.**

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Natural Gas Engine Coolant Specifications and Recommendations

Cummins Westport alternative fuel engines require the use of a fully formulated antifreeze or coolant containing a pre charge of Supplemental Coolant Additives (SCA). The antifreeze or coolant must meet Cummins Engineering Specification (CES) 14603 and also meet the specifications outlined in The Maintenance Council (TMC), Recommended Practice (RP) 329 (ethylene glycol) or RP 330 (propylene glycol). This coolant is the same coolant required for Cummins diesel engines.

The use of fully formulated antifreeze or coolant significantly simplifies cooling system maintenance. If in doubt whether the coolant meets Cummins specification, contact the supplier to obtain a copy of the Cummins registration letter that certifies the coolant meets specifications.

Cummins Westport recommends using Fleetguard ES Compleat from Cummins Filtration. ES Compleat is available in both glycol forms (ethylene and propylene) and complies with CES 14603 and TMC standards.

Cooling System Fill Procedure

The engine cooling system provides vital protection for your Cummins Westport engine. Correctly filling this system is essential to ensure its proper performance. A 50/50 mixture of antifreeze and water must be premixed before filling the cooling system.

One of the most important factors when filling the cooling system is the rate at which coolant is added. Filling the system too rapidly can cause air to become trapped in places as rapidly rising coolant blocks the air's normal escape route. This air causes stress to engine components and must be removed. Your engine cooling system is designed to eliminate air however it is important to minimize the amount of air caught in the system during filling. The key to this is patience. The slower you can fill the system, the less air will be left behind. Wait 2-3 minutes to allow air to vent, and then add coolant to bring the level to the top.

Some installations have special fill procedures due to their configuration or due to accessories that have special fill and venting requirements. Vehicles with such special procedures will have a label with instructions clearly posted near the engine as well as in the vehicle manufacturer's service literature.

Further information regarding coolant recommendations, specifications and procedures can be found in operations and maintenance manuals for each engine.

Cummins Westport manufactures and sells the world's widest range of low-emissions alternative fuel engines for commercial transportation applications and has over 20,000 alternative fuel engines in service around the world.

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