

# QMI COOLING SYSTEM CLEANER

— “Don’t put clean coolant in a dirty cooling system”

## Benefits

- Superior removal of rust, scale and deposits
- Restores coolant flow
- Restores heat transfer efficiency
- Alkaline formula does not require a neutralizer, safe for all components including gaskets and hoses
- Achieves a more complete drain of used coolant and contaminants
- Helps prevent engine overheating
- Compatible with all coolants, including ethylene glycol, polyethylene glycol & carboxylate (Extended Life), hybrid and heavy duty systems

## The Problem

To cool an engine, cooling systems transfer heat from the engine walls to the coolant and then to outside air via narrow radiator tubes. Oxidized by-product of antifreeze catch and hold rust, scale, oil residues and dirt, forming deposits that insulate and reduce heat transfer efficiency. Tap water can contain salt minerals, especially calcium and magnesium that solidify and adhere to hot metal surfaces and clog system passages. Eventually, narrow radiator tubes can become clogged, blocking coolant flow. This clogging also occurs in heater cores.

As the cooling system’s heat transfer becomes reduced, excessive temperatures can cause hoses to burst, head gaskets to blow, and cylinder heads and engine blocks to warp.

Ethylene glycol antifreeze reacts with airborne oxygen and forms acid that corrodes iron, steel and aluminum. To prevent corrosive damage, antifreeze must contain enough corrosion inhibitor to neutralize corrosive acids. Heat, dissolved oxygen and minerals use up the corrosion inhibitors, or “reserve alkalinity,” the coolant becomes acidic and corrosion accelerates. The most vulnerable components are usually the thinnest, which include the radiator and heater core.

## The Solution

QMI Cooling System Cleaner contains a specialized formula designed to safely maximize quick, effective cooling system cleaning. Quickly attacks scale, grime, grease, dirt and solder in the cooling system. Alkaline detergent components neutralize acids while cleaning and work with chelating agents to dislodge corrosion deposits, emulsifying them within the coolant for safe removal at coolant exchange.

QMI Cooling System Cleaner is designed especially for cooling systems’ unique cleaning challenges while containing no potentially harmful chemistry. Will not attack cooling system components, including rubber parts.

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## Applications

All automotive and truck cooling systems using ethylene glycol, polyethylene glycol & carboxylate (Extended Life), hybrid and heavy duty systems.

## Directions

**CAUTION:** Do not remove radiator cap while engine is hot.

1. Add QMI Cooling System Cleaner to the cooling system, top off with water, replace radiator cap.
2. Run engine to normal operating temperature to open the thermostat. Run engine 10 minutes longer with A/C off and heater on.
3. Follow QMI coolant exchanger machine or equivalent directions.

Part #	Container Size	Package
GL1540	12 ounces / 354 ml	24 per case