

# QMI COOLANT TEST STRIPS

— “All-In-One” Coolant Diagnostics strips provides three pads to test the glycol/water mix and anti-corrosion protection

## The problem

Conventional coolant analysis has been available for many years, but the addition of color dyes for marketing purposes and formula changes including ELC (Extended Life Coolants)/Long Life pose a challenge to test-strip diagnostic technology.

Various colors have been added to differentiate coolants from each other. These dyes complicate testing methods.

The condition of the anticorrosive package of conventional coolants can be analyzed by verifying their Reserve Alkalinity (RA) level, not accepted as a marker for ELC/Long Life coolants.

The ELC/Long Life formulas utilize OAT, HOAT, NOAT and MOAT technologies. Unlike conventional coolants, they operate at a full range of RA and varying pH (Acidity - Alkalinity) levels.

## The solution

QMI Coolant Test Strips are formulated with a patented color adjustment for Freeze Point/Boil Point analysis and both Reserve Alkalinity and pH level diagnostics. Our Reserve Alkalinity test combined with the pH test provides ELC/Long Life diagnostics.

Now the service technician isn't required to know what type of coolant is in the vehicle or whether it is a mixture. This enables a field test of any coolant, conventional and/or ELC, to be properly evaluated no matter what color.

QMI Coolant Test Strips provide three test pads:

- 1) Freeze Point/Boiling Point,
- 2) Reserve Alkalinity and
- 3) pH.

1. The first pad provides glycol content to adjust Freeze Point/Boil Point; simply compare the end pad to the “Red Coolants” chart or “All Others” coolant chart.



2. The middle pad provides Reserve Alkalinity level. If the RA is in the “Pass” level of 6.6 or above, the test is concluded. If not, proceed to the pH test.
3. The pH pad is only used if the RA level was below 6.6, providing a final “Pass” or “Fail.” Coolants lower than 6.5 or 11 and above are considered not acceptable.

QMI's user friendly “All-In-One” Coolant Diagnostics method is more sophisticated to ensure less false positives and false negatives on all coolants.



## Applications

All internal combustion engine type cooling systems.

## Storage, shelf life & handling

Store at room temperature with the bottle cap tightly closed, not in direct sunlight.

Test strips stored properly in bottle packages are guaranteed to work two years from date of manufacture.

Avoid handling test strips with wet and/or oily hands.

## Packaging

Part#	Package
GL2500	70 test strips per bottle

**See Page 2 for:**  
Coolant Diagnostic Test Procedure  
Correct and Incorrect Coolant Sources

**Note:** Always use safety measures, including protective gloves and safety glasses, when performing QMI Coolant Test Strips coolant diagnostics.

## Coolant Diagnostic Test Procedure

QMI's "All-In-One" coolant diagnostic dip-strips provide testing for both glycol/water mix (should be 50% glycol/water) and the condition of the anti-corrosive package (Reserve Alkalinity "RA" and Acidity - Alkalinity "pH").

Testing is simple and accurate, but sometimes performed incorrectly. Please follow these steps and you'll find the QMI Coolant Test Strips easy to use and simple to read for both you and your customers:

1. **Dip Test Strip into coolant that is less than 100°F / 43°C** for two seconds (immerse all three test pads).
2. Remove from coolant and shake once briskly to remove excess coolant.
3. Wait 40 seconds for pads to cure. Complete the following test pad checks within 30 seconds.\*



4. Check the end pad first using the bottle's Freeze Point / Boiling Point chart. The pad color should indicate 50% Glycol.

*A significant benefit of QMI Coolant Test Strips coolant diagnostics is that you don't need to know the service history of the vehicle or if coolants have been mixed or otherwise. If the coolant is RED, use the "RED Coolants" Freeze Point / Boiling Point chart (it adjusts for the red dye). For all other coolants use the "All Others" Freeze Point / Boiling Point chart.*

5. Compare the middle pad to the bottle's "Reserve Alkalinity" chart. If the coolant's Reserve Alkalinity is 6.6 or higher, the coolant is GOOD (PASS) and the test is completed.

*Only "Go To The Next Step" if the coolant's Reserve Alkalinity is below 6.6.*

6. Compare the strip handle pad to the bottle's "pH" chart for a final "PASS or "FAIL" evaluation.

This test identifies coolant that needs service and allows you to provide a superior fluids preventative maintenance program for your customers.

## Correct Coolant Sources



Okay to use conventional radiator pressure cap



Okay to use coolant purge bottle (note pressure cap)

## Incorrect Coolant Source



Do not use coolant overflow bottle

\* The Test Strip color is accurate until it dries, which will vary due to atmospheric conditions. If you need to show the customer the color after it dries, perform a re-test.