

## Is Your Agilent Spectrometer as Cool as it Should Be?



### Learn the value of knowing Agilent Cool Clear coolant fluid is protecting your spectrometer

Some users assume that any type of water will keep their spectrometer cool. But off-the-shelf coolants, tap water, or deionized water do not contain the corrosion inhibitors and other chemicals needed for optimum performance. Without these chemicals at the right levels, corrosion can occur and deposits can build up in the cooling water circuit. This reduces cooling efficiency or even causes blockages, leading to unplanned downtime.

Agilent investigated non-approved coolants and identified Cu and Zn corrosion products in the water. Agilent Cool Clear coolant fluid has been developed to provide the best protection for your spectrometer cooling circuit. It includes a corrosion inhibitor to prevent cooling circuit corrosion and the associated maintenance costs. In our long-term testing, Agilent Cool Clear clearly out-performs alternative non-approved coolants and de-ionized water, which do not provide corrosion protection.

**Figure 1.** A series of images of a cooling water manifold showing build up of corrosion deposits after several months of operation using different types of water in the cooling circuit.



After 4 months use with de-ionized water, corrosion of the internal surfaces is easily identified by the darkened areas. The observed degradation is much worse compared to the use of non-genuine coolant.



After 2 months use with non-genuine coolant, which does not include any corrosion inhibitor, corrosion of the internal surfaces is easily identified by the darkened areas.



After 3.5 months use with genuine Agilent Cool Clear coolant, which includes corrosion inhibitor, the internal surfaces remain unblemished, confirming superior corrosion protection.

**Don't put your instrument performance at risk!  
Use genuine Agilent Cool Clear in your chiller or heat exchanger.**

Agilent Cool Clear has been specially formulated by our chemists to include the perfect corrosion inhibitor at the correct concentration. Cool Clear is supplied ready to use straight from the bottle. The pack size (2 US gallons) is ideal for replacing the fluid in the Agilent chiller and spectrometer cooling circuit, leaving you with a small excess for any top ups required.

Annual replacement of your coolant is recommended, which can be completed by the Agilent service engineer as part of our instrument preventative maintenance service.

If you choose to replace the coolant yourself, remember to set an annual reminder with Early Maintenance Feedback (EMF) on your Agilent instrument software. Then you never need to worry about problems with your cooling circuit.



[Agilent Cool Clear 5799-0037](https://www.agilent.com/chem/5799-0037)

[www.agilent.com/chem](https://www.agilent.com/chem)

DE37395585

This information is subject to change without notice.

© Agilent Technologies, Inc. 2022  
Published in the USA, January 31, 2022  
5994-4576EN