



How to take care of your Agilent Max-Light Cartridge Cells

Thank you for purchasing a Max-Light Cartridge Cell for your Agilent G4212A/B or G7117A/B/C DAD detectors. These flow cells have been designed for maximum sensitivity and simplicity. To ensure maximum lifetime, we recommend following the 'Best Practices' for these products as provided below.

General Information

Included part numbers:

p/n	Description
G4212-60008	Max-Light Cartridge Cell (10 mm, V(σ) 1.0 μ L)
G4212-60007	Max-Light Cartridge Cell (60 mm, V(σ) 4.0 μ L)
G4212-60032	HDR Max-Light Cartridge Cell (3.7 mm, V(σ) 0.4 μ L)
G4212-60038	ULD Max-Light Cartridge Cell (10 mm, V(σ) 0.6 μ L)

Table 1 Maximum pressure specification

Maximum operating pressure	70 bar
Maximum incidental pressure	150 bar



Best Practices

NOTE

Pay attention to the pressure limit of the cell.

Avoid pressure increase related to sources behind the flow cell

- Use a standard (0.7 mm ID) waste tubing on the Max-Light Cartridge Cell and ensure that there are no kinks or blockages.
- Agilent strongly recommends installing a pressure relief valve (Inline Pressure Relief Valve Kit (G4212-68001)) when another module is installed in the flow path behind the flow cell (for example, LC/MSD, FLD, ELSD).

The pressure relief valve protects the flow cell from overpressure and can be cleaned and re-activated.

- Do not touch the light inlet and outlet of the cell with your fingers. This will add a layer of contamination on the flow cell window and reduce the light throughput.
- Do not let buffers stay for long times in the Max-Light Cartridge Cell.
 - Flush the Max-Light Cartridge Cell when finished with the application.
 - Use fresh, clean water, followed by isopropanol, if the cell is not in use for more than 1-2 days.
 - Flush out the isopropanol first with water, before switching to buffers again.

Avoid blockages within the flow cell

- Don't use a VWD outlet tubing on a Max-Light Cartridge Cell, as it contains a restrictor.
- Using PEEK-FS capillaries is not recommended.

In combination with the SST zero dead volume fitting (for example, at the inlet) the capillary could break, and the glass particles could block or damage the flow cell.

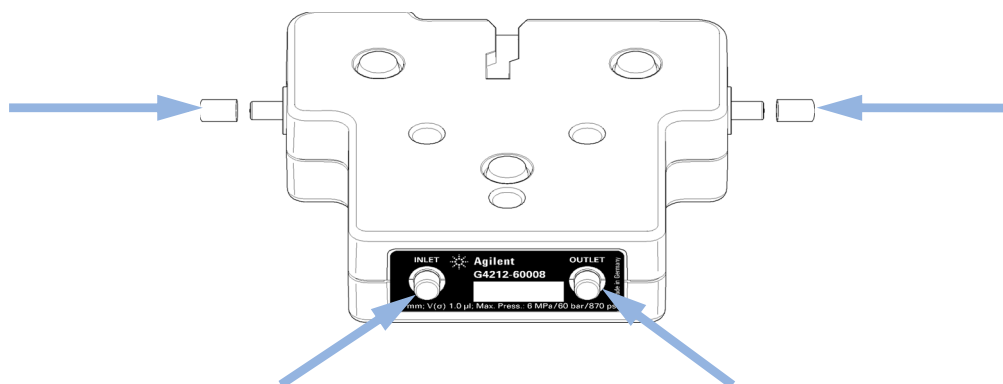
- Be aware of possible precipitation. Buffers, such as KH_2PO_4 , can precipitate crystals once the percentage of the organic solvent is too high.

From a chromatographic point of view, there's no need to always go up to, for example, 100 % ACN.

- Consider installing an inline filter (1290 Infinity II Inline Filter Kit (5067-6189)) in front of the flow cell.

General handling recommendations

- Do not expose the Max-Light Cartridge Cells to shocks.
 - Avoid storage in a drawer.
 - Storage in a dry cabinet is recommended.
- Install the white plugs and black caps before storing.



- Annually perform a preventive maintenance on the instrument.
- Always use HPLC-grade or higher-grade solvents. Do not use technical grade isopropanol for flushing.
- Replace water-based mobile phases daily.
- Consider filtering solvents (also water) through 0.2 µm filters.
- Replace organic mobile phases at least every second day.
- Always use fresh solvents and solvent bottles:
 - Do not refill the bottles straightaway.
 - Rinse the bottle first with fresh solvent, empty it, then fill it with fresh solvent.
- Inspect solvent bottles and inlet filters for damage or discoloration.
- If not in use for several days, flush the entire system with water and finally with isopropanol.
- At installation, flush the entire system thoroughly with isopropanol and then with water before connecting the flow to the Max-Light Cartridge Cell.



D0002035
Edition: 02/2020

Printed in Germany

© Agilent Technologies, Inc 2020

Agilent Technologies, Inc
Hewlett-Packard-Strasse 8
76337 Waldbronn
Germany