

# Make GC/MS Column Changes in Minutes Without Venting

## EZ No-Vent™ Connector Allows Fast Re-equilibration with No Loss of Data

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- Cut downtime by 50% or more when changing columns.
- No special tools - no extra plumbing - low cost.
- Gold plated for inertness.
- 100µm ID transfer line keeps analytes focused.



detailed investigations confirmed the EZ No-Vent™ connector will allow several column changes in a single day, with no harm to the MS or loss of data.

If you're tired of waiting for your MS to stabilize after column changes, we highly recommend an EZ No-Vent™ connector. It will greatly reduce downtime and increase sample throughput.

**Figure 1** MS transfer line installed in an EZ No-Vent™ connector. Connection can be made quickly, without special tools.



A laser machined critical orifice in the EZ No-Vent™ connector minimizes the amount of air admitted into the MS source, eliminating the need for purge gas and for the lengthy vent and pump-down cycle otherwise required with a column change. This can save hours of downtime with each column change. The EZ No-Vent™ connector easily attaches to the MS source without special tools or extra plumbing: Figure 1 shows the connector installed and ready for use.

We tested the EZ No-Vent™ connector for dead volume, using highly volatile gases that are very susceptible to tailing. For reference, we operated the system as a purge-and-trap GC/MS system, with a split at the injection port and with the column inserted directly into the MS inter-

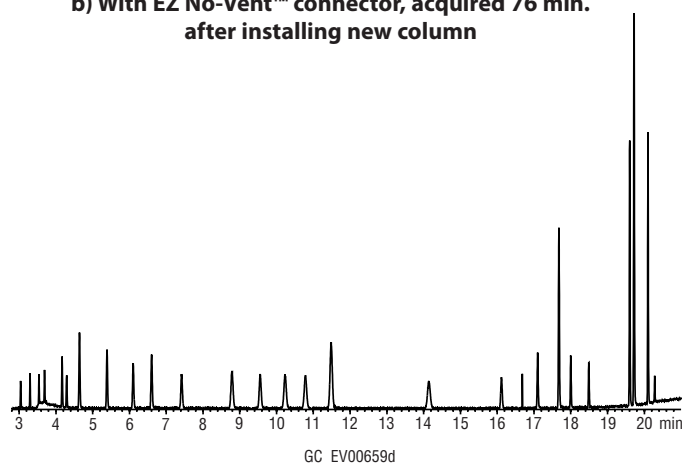
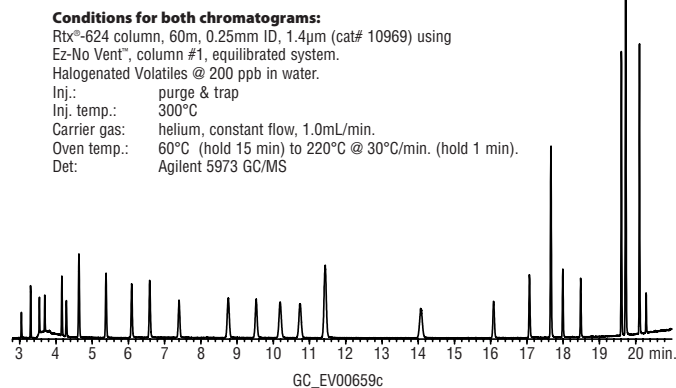
face. When we installed the EZ No-Vent™ connector in the MS interface, we anticipated that any dead volume in the connector would be revealed by tailing and broader peaks, relative to direct connection. Peak shape was excellent.

After establishing the connector had no effect on peak shape, we evaluated the ability of the MS to stabilize after a column change without venting. Again we used a purge-and-trap system, and halogenated volatiles as the analytes. We acquired Figure 2a, changed the column, and acquired Figure 2b 76 minutes later. Note the peak shapes and responses are unchanged. In the interval between the two analyses we verified MSD tuning, and the system passed bromofluorobenzene (BFB) criteria. Subsequent

**Figure 2** Sample acquired within an hour and a half after changing columns, using an EZ No-Vent™ connector.

**a) First column, equilibrated system**

**b) With EZ No-Vent™ connector, acquired 76 min. after installing new column**



### EZ No-Vent™ GC Column-Mass Spectrometer Connector

Description	qty.	cat.#
EZ No-Vent™ Connector Kit for Agilent 5971/5972 and 5973 GC/MS Kit includes: EZ No-Vent™ Connector, two 0.4mm ID ferrules for capillary column, two 0.4mm ID ferrules for transfer line, 100µm deactivated transfer line (3 ft.), column plug, column nut.	kit	21323
Replacement ferrules for connecting capillary column to EZ No-Vent™:		
0.4mm ID	2-pk.	21015
0.5mm ID	2-pk.	21016
Replacement ferrules for connecting transfer line to EZ No-Vent™: 0.4mm ID	2-pk.	21043
Replacement 100µm deactivated transfer line	3 ft.	21018
Replacement EZ No-Vent™ Column Nut	5-pk.	21900
Replacement EZ No-Vent™ Plug	2-pk.	21915
Open-End Wrenches (1/4" x 3/16")	2-pk.	20110

Restek offers supplies and innovative tools for your MS. Refer to our general catalog.

Did you know?

