

Bubbling or Fizzing Coming from a New Cogent TYPE-C Column - Tech Information

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Don't Be Alarmed!

Bubbling or Fizzing When Opening a New Cogent TYPE-C™ Column Is Normal

If you notice bubbling, fizzing, or a brief gas-liquid escape when removing the end plugs from a brand-new Cogent TYPE-C™ HPLC column, there is no need for concern. This phenomenon is rare but entirely harmless, and it does not indicate column damage, performance issues, or compromised packing quality.

Why Does This Happen?

During manufacturing, several steps involve solvents and reagents that can become **temporarily trapped in the smaller pores** of the silica-hydrate stationary phase:

- Residual reagents from chemical bonding
- Packing solvents used during column assembly
- Volatile components that accumulate during storage or shipping

Over time—especially during transport—these trapped materials may migrate slightly within the column bed. When you remove the end plug for the first time, these volatile pockets can escape as a soft bubbling or fizzing sound.

This is normal behavior for porous silica materials and does not affect column lifetime, stability, or chromatographic performance.

Why the Column Is Not Damaged

The bubbling does not indicate:

- A leak
- A void in the packed bed
- A breach or channel in the column
- Chemical degradation
- Improper packing

Instead, it simply reflects minor solvent outgassing—a benign effect of high-surface-area silica hydrate materials releasing adsorbed species. MICROSOLV emphasizes that once conditioned, the column performs identically to any other new Cogent TYPE-C column.

Proper Conditioning Removes Any Residual Solvent

Following the standard conditioning procedure will wash out residual solvents and completely eliminate any bubbling:

1. Begin with a suitable starting mobile phase or recommended flush solvent
2. Allow several minutes of flow at low rate, increasing gradually
3. Continue flushing until the baseline stabilizes and no visible microbubbles appear

After this brief preparation, the column is fully ready for use and will deliver the expected retention, reproducibility, and peak shape that Cogent TYPE-C columns are known for.

Does the Bubbling Affect Column Life or Chromatography?

No.

We confirm that this occurrence has no negative impact on:

- Column lifespan
- Efficiency
- Selectivity
- Silica hydride stability
- ANP or RP retention behavior
- Method reproducibility

Once conditioned, the column behaves exactly like any other new unit, and the issue does not recur.

Conclusion

A brief bubbling or fizzing sound upon opening a new Cogent TYPE-C column is simply the release of residual packing or synthesis solvents trapped in the silica pores. It is safe, expected in rare cases, and fully resolved by normal conditioning—with absolutely no effect on column performance or longevity.

[Cogent TYPE-C Silica HPLC columns](#)



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