

When Should You Use Snap Caps vs. Screw Caps - HPLC Primer

Date: 29-OCTOBER-2013 Last Updated: 2-FEBRUARY-2026

Choosing the right cap for your autosampler vials can help prevent leaks and protect your sample. Here's a straightforward guide to help you decide when to use snap caps and when to use screw caps.

Snap Caps — Best for Convenience

Snap caps are ideal when you need to cap many vials quickly. They press on easily and don't require twisting.

They work well when:

- You're handling large batches of samples
- Your samples contain water or non-volatile solutions
- The vials are not being heated above room temperature

Snap caps are chosen mainly for ease and speed.

Screw Caps — Best for a Tight, Reliable Seal

Screw caps provide a **much stronger seal** than snap caps—as long as the cap threading matches the vial correctly.

They are the better choice when:

- Your sample contains volatile solvents (e.g., methanol, acetonitrile)
- You want to minimize evaporation
- You need a more secure seal for storage or autosampler use

If your solvent evaporates easily, you should always use screw caps. They simply seal better.

Does the Cap Type Affect Your Sample?

No — your sample should never touch the cap itself.

The only thing that matters is:

- How secure the seal is, and
- Whether your solvent is volatile or heated

So the choice is based on your workflow, not the sample chemistry.

Summary

- Use **snap caps** for speed and convenience with non-volatile samples.
- Use **screw caps** for the best seal, especially with volatile solvents or when heating.

If you're not sure which cap to choose, our technical team can help recommend the right option for your method and autosampler.

[Autosampler Vials, Caps & Inserts Ordering Information](#)

AUTOSAMPLER

VIALS AND CAPS

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