

What is the difference between precision point and conical point autosampler vial inserts - FAQ

Choosing the Right Precision Insert for Your Application

When working with limited or valuable samples, selecting the right insert can make a significant difference in recovery and ease of use. MICROSOLV offers two precision-engineered insert styles—each designed to meet specific analytical needs.

Precision Point Inserts

This insert features a sharply tapered internal point, created using a mandrel during manufacturing. The result is:

- Extremely consistent internal dimensions from insert to insert
- Minimal residual volume, ideal for maximum sample recovery

Note: Due to the narrow geometry, surface tension may cause small air bubbles to form during filling. A gentle tap or "flick" at the bottom of the insert can help dislodge these bubbles.

Conical Point Inserts

Also mandrel-formed, this insert has a wider conical taper at the bottom. It offers:

- Excellent dimensional precision
- Reduced bubble formation, making it easier and faster to fill

This design is especially useful when speed and convenience during sample preparation are priorities.

Which Insert Should You Choose?

- Choose the Precision Point Insert if your priority is maximum sample recovery and minimizing residual volume.
- Choose the Conical Point Insert if you prefer easier filling and want to reduce the chance of air bubble formation.

Both inserts are manufactured to the highest standards of consistency and performance, ensuring reliable results vial after vial.

Click [HERE](#) for low volume Insert ordering information and pictures