

What does residual volume mean with autosampler vials – FAQ

The syringe needle of an autosampler does not go all the way to the bottom of a vial during injection, and therefore some sample will always remain in the vial. This is referred to as the residual volume of the autosampler vial.

Some vials have a tapered bottom for example, which decreases the **residual volume**. This can be important if the sample is valuable and of limited amount.

However, the **residual volume** value is nominal and every situation is unique because different autosamplers have different depths that they travel in the vial and some have side port needles and some have bottom ports.

The following diagram illustrates how **residual volume** will remain in the vial after the syringe needle can no longer aspirate the liquid:



Unlike other vials, the AQ™ and RSA™ brand Vials have a specification for bottom height. This specific tolerance of the bottom height allows you to bring the needle down to the lowest position necessary.

[Low Residual Volume Vial information](#)

[RSA Vials Product Page](#)

[Inserts Product Page](#)

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