

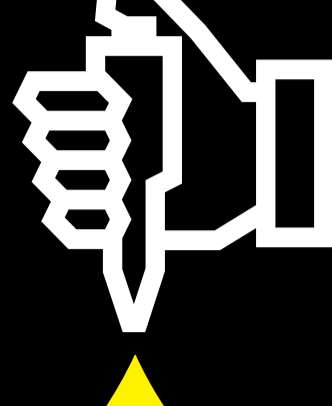
ISO 8655:2022 Part 10: How to Achieve Pipetting Compliance

In 2024, ISO 8655:2022 was expanded to include a new Part 10, providing essential guidelines for setting up an ISO-compliant laboratory environment. Learn how these updates effect your pipetting workflows.

Pipette and Tip Selection

Pipette:

- **Volume Range:** Match nominal volume to intended delivery.
- **Liquid Properties:** Consider viscosity and volatility.
- **Type & Size:** Choose based on application and frequency.
- **Performance:** Align with performance needs.



Pipette Tip:

- **Compatibility:** Ensure fit with pipette model.
- **Material & Design:** Minimize liquid retention.
- **Sterility:** Use sterile, defect-free tips.

Pipette and tip make a complete system

Sartorius Recommendations

- **Fixed vs. Variable Volume:** Fixed for repetitive tasks; variable for flexibility
- **Single vs. Multichannel:** Single for individual sample precision; multichannel for high-throughput
- **Mechanical vs. Electronic:** Electronic for higher ergonomics and efficiency
- **Volume Lock:** Prevents accidental changes
- **Maintenance:** Easy to disassemble, clean and autoclave
- **Tip Type:** Use validated original tips according to application needs



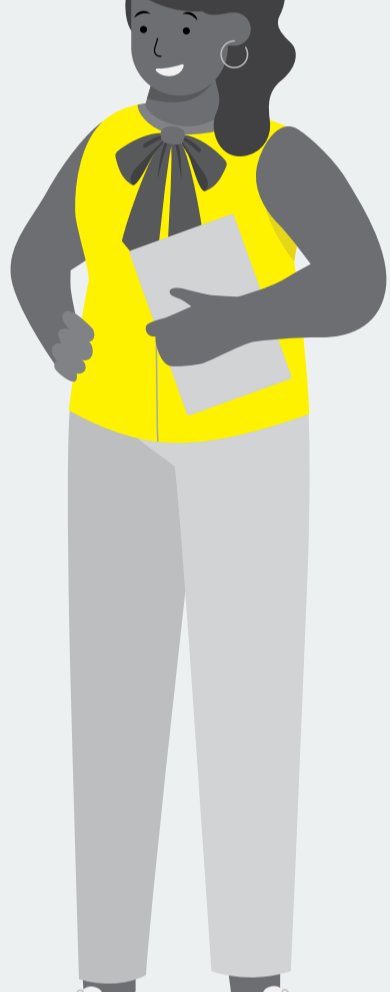
Pipetting Technique

General Use:

Use air-displacement pipettes for aqueous solutions. Apply reverse pipetting technique for non-aqueous liquids.

Environment:

Maintain thermal equilibrium between pipette, tip, and liquid.



Technique:

Use consistent speed, correct immersion angle, and pre-wet tips to minimize errors.

Maintenance:

Perform regular calibration, maintenance, and checks.

Pipette Qualification | Re-qualification

Regular assessment is critical to qualify your pipette for its intended use.



- Set calibration and testing requirements.
- Consider maximum permissible errors.
- Establish process tolerances.
- Perform routine testing and maintenance.

User Qualification

Pipetting technique directly impacts the quality and reliability of results.

- Require comprehensive training on pipette use.
- Perform regular assessments to ensure proper technique.
- Keep detailed documentation of training and assessments.

ISO 9001 Certified Pipetting Academy

- Learn how to establish a Maintenance and Calibration Program.
- Understand why pipetting technique matters.
- Identify sources of error.
- Get tips for working with different liquids and conditions.



Sartorius Services

Maintenance and Calibration Services

- Onsite and workshop ISO 8655-compliant services
- Calibration services per ISO/IEC 17025
- Maintenance and repair for all makes and models

