

Liquid Bottle Top Dispenser Calibration Policy

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Verify dispenser accuracy before medical use by test-dispensing into an empty cup on a zeroed scale whenever possible.

1. Purpose

To ensure liquid bottle top dispensers used for compounding or medication preparation measure accurately, consistently, and safely before use in patient care activities.

2. Calibration Frequency

- Calibrate at least every **3 to 6 months**.
- Calibrate whenever the dispenser is moved.
- Calibrate whenever measuring accuracy is in question.
- Calibrate after cleaning, repair, maintenance, or replacement of parts when appropriate.
- Follow the manufacturer and model-specific user manual.

Daily Accuracy Check

- Use a clean empty cup on a zeroed scale.
- Dispense a test amount before medical use.
- Confirm the measured weight matches the expected amount.
- Repeat if the result appears inconsistent.
- Remove dispenser from service if accuracy is questionable.

When to Recheck Accuracy

- At the start of compounding use each day.
- After dispenser is moved.
- After cleaning or reassembly.
- After product change.
- If air bubbles, leakage, sticking, or irregular dispensing occurs.

3. Standard Calibration / Verification Procedure

Step	Procedure
1	Review the dispenser manufacturer's user manual before calibration.
2	Ensure the dispenser is clean, properly assembled, primed, and free of air bubbles.
3	Place a clean empty cup on a calibrated scale and zero/tare the scale.
4	Dispense the selected test volume into the cup.
5	Compare the measured weight with the expected weight for the liquid being dispensed.
6	Repeat the test if the result is inconsistent or outside acceptable range.
7	Adjust or recalibrate according to manufacturer instructions if needed.
8	Document calibration or daily accuracy verification in the appropriate log.

Calibration Log

- Date of calibration.
- Dispenser identification.
- Liquid or test product used.
- Target volume or weight.
- Observed weight.
- Pass/fail result.
- Staff initials.

Daily Verification Log

- Date and time checked.
- Scale used.
- Test amount dispensed.
- Observed measurement.
- Corrective action if needed.
- Staff initials.

4. Out-of-Range or Questionable Results

- Stop using the dispenser immediately.
- Repeat verification using a clean cup and zeroed scale.
- Check for air bubbles, loose parts, residue, leakage, or incorrect assembly.
- Clean, reassemble, and prime the dispenser if needed.
- Recalibrate according to the manufacturer's instructions.
- Notify the pharmacist or manager if the issue is not resolved.

5. Important Notes

- Instructions may vary by manufacturer and model.
- For specific instructions, follow the user manual or calibration and cleaning guide.
- Always document each calibration.
- It is good practice to document daily accuracy verification before medical use.
- Calibration and verification records must be available for pharmacy review or inspection.

Liquid Bottle Top Dispenser Calibration and Daily Accuracy Verification Policy