**Purpose:**

This SOP will address the basic procedure, and frequency for the calibration check of the analytical balance used for compendial analysis.

**Frequency:**

A calibration check will be performed on the analytical balance by a quality analyst on a weekly basis.

**Procedure:**

1. Clean balance of any dust or powder using the brush supplied with the check weights, which are located in the marked box in the drawer below the analytical balance. After cleaning close all balance doors.
2. Press zero key and check that digital readout reads 0.00000 g within 4 seconds. Repeat once if digital readout fails to display 0.00000 g within 4 seconds.
3. Press Adjust.int function key. The balance will run through a calibration, zeroing check and temperature adjusting procedure. When it is finished it will signal 'Adjustment Done' on the screen along with the temperature. If 'Adjustment Done' does not appear within one minute, repeat the procedure once. If 'Adjustment Done' still does not appear report the problem to the laboratory supervisor or the person responsible for the balance and contact METTLER TOLEDO’s service organization for advice.
4. Check the accuracy of the balance by carefully weighing the check weights. Always use the forceps provided to handle the calibration weights. Do NOT handle the weights with fingers. Use the 100 g weight and then the 5 g weight. Record the data and results in the “USP Analytical Balance Calibration Check Log”.

**Evaluation:**

For each check weight evaluate whether the noted value exceeds the defined “Warning Limit”.

For each check weight evaluate whether the noted value exceeds the defined “Control Limit”.

**Deviation:**

***Warning Limit***

If the *Warning Limit* is exceeded repeat the test. If the *Warning Limit* is again exceeded, level the balance, perform adjustments with built-in or external adjustment weights and repeat the test. If the warning limit is still exceeded, report the problem to the laboratory supervisor or the person responsible for the balance and contact Mettler Toledo’s service organization for advice.

***Control Limit***

If the control limit is exceeded report the problem to the laboratory supervisor or the person responsible for the balance, mark the balance as “out of control limits” and contact Mettler Toledo’s service organization for advice.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Revision  Number | Revision  Date | Effective  Date | Revision  Author | Quality  Approval | Production Approval | Revision Description |
| 00 | 02/21/2012 | 02/21/2012 | Stephen Ballew | Deborah  Durbin | Jason  Bumgarner | New Document |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |