Montgomery County Community College 340 Dekalb Pike Blue Bell, PA Document Number: MET 16 Revision Number: 0 Effective Date: 18JAN22 Page 1 of 2

# **SOP:** Calibration of Ohaus Pioneer Electronic Balance

## **Approvals:**

Preparer: Isaiah Dennis	Date:	14DEC21
Reviewer: Robin Zuck	Date:	20DEC21
Reviewer: Dr. Maggie Bryans	Date:	17JAN22

#### **1.Purpose:**

1.1. Calibration of Ohaus Pioneer Electronic Balance

## 2.Scope:

2.1. Applies to the calibration of the Ohaus Pioneer Balance using standard mass.

## **3.Summary of methods:**

3.1. One point calibration with a Class 2 standard mass.

#### 4.References:

4.1. Pioneer PX Series Balances Instruction Manual

## 5.Definitions: N/A

## 6.Precautions:

- 6.1. Gloves, a lab coat, and protective eyewear should be worn.
- 6.2. Do not handle the Mass Standards with ungloved hands, use tweezers when handling mass standards.

## 7.Responsibilities:

- 7.1. It is the responsibility of the course instructor/lab assistant to ensure that this SOP is performed as directed and to update the procedure when necessary.
- 7.2. It is the responsibility of the students/technicians to follow the SOP as described and to inform the instructor about any deviations or problems that may occur while performing the procedure.

## 8.Materials:

- 8.1. 100g Class 2 standard mass for external calibration
- 8.2. Tweezers
- 8.3. Soft cleaning brush
- 8.4. Ohaus Pioneer Electronic Balance

## 9.Procedure:

- 9.1. Single point Calibration of Ohaus Pioneer Balance
  - 9.1.1. Check the inside of the balance to make sure that there is no chemical residue on the pan or surrounding area. Ensure that the pan is properly placed on the base. If needed, adjust the pan to make sure it rests on the flat on the balance, use a brush to wipe off any excess material from the pan and inside of the balance.
  - 9.1.2.Check the level indicator to see if the bubble is in the center, if it is not, adjust by turning the dials on the feet of the balance.
  - 9.1.3. Press and hold the **Tare** button below balance display for about 1 second. A series of dashes and the words "MENU" on the right and "Calibration" on the bottom left will be displayed. If the display does not show Calibration, press the **No** (Print) button below the display until "Calibration" is displayed on the bottom of the screen. When "Calibration" is displayed press the **Yes** (Zero) button below the display to enter the calibration menu.

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- 9.1.4. The display will show a series of dashes, and "CAL" on the right. Press the No button until "Span Cal" is displayed on the bottom of the display. Press the Yes button to select Span Cal.
- 9.1.5. The balance will display a specific weight (usually 150.000g) to be placed on the balance. If the weight displayed is not 100g press the No button until 100g is displayed. When the weight specified is 100g press the Yes button.
- 9.1.6. Using tweezers carefully place the 100g standard mass on the balance pan.
- 9.1.7. When the machine displays, "Remove Weights" carefully return the weight to its container.
- 9.1.8. When the calibration is completed the display will read "Calibration done". Press the **Exit** button below the display to exit calibration mode.
- 9.1.9.The balance is now ready for use.

#### **10.History:**

Revision	Effective		
Number	Date	Preparer	Description of Change
0		Isaiah Dennis	Initial release