1. **PURPOSE:**

To provide the procedure Operation and calibration of Hot Air Oven.

1. **SCOPE:**

This procedure is applicable to all the cleaning of sampling tools used in Quality control department at Discovery.

Make : Bio-Tech

ID No. : DIPL/QC/INS/MF/001

1. **RESPONSIBILITY:**
   1. Analyst-QC is responsible to follow this SOP.
   2. Head-QC/Designee is responsible for ensuring implementation of this SOP.
   3. Head-QA/Designee is responsible for monitoring overall compliance of this SOP.
2. **DEFINITIONS:**

Nil.

1. **PROCEDURE:**
   1. **Precaution**
      1. Ensure that the power supply to the equipment is switch off before cleaning
      2. Check that the instrument and surroundings are clean, if not, clean with a soft cloth with duster.
      3. Clean the equipment with a clean dry cloth every day.
   2. **Operation:**
      1. Ensure that the instrument is properly connected to the power supply.
      2. Switch ON the main switch.
      3. Main indicator red button will glow.
      4. Ensure that the set knobs & thermostat knobs are in zero position.
      5. Set the temperature by using the digital temperature control.
      6. Press the red button and use the coarse and fine buttons for small increments of temperature.
      7. Switch ON the fan switch button.
      8. Let the temperature come to desired temperature and counter check using a thermometer or Digital temperature indicator.
      9. Keep the test samples and close the door of the oven properly and tightly.
      10. Switch OFF the oven after completion of testing.
      11. In case of any break down, inform the defect to Manager-QC
      12. Check the performance after rectification.
   3. **Calibration: Frequency: Once in 3 Months.**
      1. Set the oven to 100°C, wait till the set temperature is reached
      2. Put the standard thermometer or Digital temperature indicator in right side of hot air oven, close the oven door.
      3. Allow the temperature to equilibrate for 30 minutes.
      4. Set the following temperature : 50°C, 100°C, 150°C and 200°C
      5. Observe the temperature shown by the thermometer or Digital temperature indicator.
      6. The temperature shall not differ by more than + 2°C
      7. Record the temperature observed in calibration record of Hot air oven.
2. **FORMATS / ANNEXURE(S):**
   1. Digital temperature indicator (HOT AIR OVEN) calibration : QC007-FM041
   2. Instrument Usage Log Book : QC048-FM086
3. **CHANGE HISTORY:**

| **Revision No.** | **Effective Date** | **Details of Revision** | **Ref CCF No.** |
| --- | --- | --- | --- |
| 00 | 01.06.2007 | New SOP introduced across all the API manufacturing facilities of Discovery. | -- |
| 01 | 01.08.2009 | All formats given clear and clarity | -- |
| 02 | 01.06.2014 | 1. Acceptance criteria change to ±20C from ±20C and ±40C 2. Formats are the part of SOP. So prepared separately. | -- |
| 03 | 01.01.2017 | SOP format changed make to in line with SOP-QA-001-04. | QC-CRF-025/16 |
| 04 |  |  |  |