1. **PURPOSE:**

To describe the procedure for Operation and calibration of MUFFLE FURNACE.

1. **SCOPE:**

This procedure is applicable to the muffle furnace Analyzer of quality control at Discovery.

Make: Indian Biotechns

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. **Cleaning:**
      1. Check that the power supply to the instrument is switched “OFF”
      2. Ensure that the Muffle Furnace is not hot or in operation.
      3. Clean the instrument externally with clean dry cloth.
   2. **Procedure:**
      1. Ensure that the instrument is connected to the power supply
      2. Switch “ON” the main power supply.
      3. Switch on the instrument by switching “MAIN”
      4. Set the instrument required by pressing and holding the red “TEMP SET” knob and Rotate the temperature knob to the required temperature.
      5. Set the “HEATER” to adjust the rate of increase of temperature.
      6. The digital display shows the actual temperature of furnace and the red light of the Temperature controller glows.
      7. When temperature reached at the setting point, there light of temperature controller Automatically switched “OFF”
      8. Muffle Furnace is now ready for carry out required analysis.
      9. Report for any discrepancy observed during operation inform to Officer-Maintenance for rectification
   3. **Calibration:**

Temperature Calibration shall be done through external services once in a year and after each maintenance job**.**

1. **FORMATS / ANNEXURE(S):**
   1. Instrument Usage Log Book : QC048-FM086
2. **CHANGE HISTORY:**

| **Revision No.** | **Effective Date** | **Details of Revision** | **Ref CCF No.** |
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| 00 | 01.06.2007 | New SOP Calibration of Equipment is introduced across all the API manufacturing facilities of Discovery | -- |
| 01 | 01.08.2009 | Formats changed with more clear and clarity | -- |
| 02 | 01.06.2014 | 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 |